APPENDIX E MACT COMPLIANCE OPTIONS

This Appendix provides a list of the principles governing the compliance options matrix approach (Figure E-1), followed by compliance options matrix tables for 15 different scenarios according to the type of affected source, the method of compliance, and the plant configuration. A complete example of the compliance options matrix approach, including examples of the complementary permit conditions, is also presented for a facility that operates wide-web flexographic presses and uses compliant coatings.

Γables	Type of Affected	Air Pollution Control		Compliance	
Table	Source	Device	Configuration	Approach	Page
E-1	PR	Any	Any	All	E-4
E-2	PPR/WWF	None	Any	Compliant materials	E-9
E-3	PPR/WWF	Solvent Recovery	1 CS, 1 APCD, only ACWS	LLMB	E-12
E-4	PPR/WWF	Solvent Recovery	1 CS, 1 APCD, only ACWS	CEMS	E-14
E-5	PPR/WWF	Solvent Recovery	>1 CS and/or >1 APCD, only ACWS	LLMB	E-18
E-6	PPR/WWF	Solvent Recovery	>1 CS and/or >1 APCD, only ACWS	CEMS	E-21
E-7	PPR/WWF	Solvent Recovery	\$1 NCWS and/or \$1 ICWS	LLMB	E-26
E-8	PPR/WWF	Solvent Recovery	\$1 NCWS and/or \$1 ICWS	CEMS	E-29
E-9	PPR/WWF	Oxidizer	1 CS, 1 APCD, only ACWS	CPMS	E-33
E-10	PPR/WWF	Oxidizer	1 CS, 1 APCD, only ACWS	CEMS	E-37
E-11	PPR/WWF	Oxidizer	>1 CS and/or >1 APCD, only ACWS	CPMS	E-41
E-12	PPR/WWF	Oxidizer	>1 CS and/or >1 APCD, only ACWS	CEMS	E-46
E-13	PPR/WWF	Oxidizer	\$1 NCWS and/or \$1 ICWS	CPMS	E-51
E-14	PPR/WWF	Oxidizer	\$1 NCWS and/or \$1 ICWS	CEMS	E-55
E-15	PPR/WWF	Mixed APCDs and/or a	mixed CSs and/or mixed complian	ce approaches	E-59

CS = Capture system LLMB = Liquid-liquid material balance

APCD = Air pollution control device CEMS = Continuous emissions monitoring system ACWS = Always-controlled work stations CPMS = Continuous parameter monitoring system

NCWS = Never-controlled work station

ICWS = Intermittently-controllable work station

PR = Publication Rotogravure

Figures

PPR/WWF = Product and Packaging Rotogravure/Wide-Web Flexographic Printing

Example of the Compliance Options Matrix Approach for a Wide-Web Flexographic Facility E-62

At a minimum, the compliance options matrix must meet the requirement of section 504(a) of the Clean Air Act. In other words, the matrix (and associated permit conditions) must include the conditions that are necessary to assure compliance with the MACT standard.

The compliance options matrix must include the emissions units and link them to the emissions limits that apply. As indicated in White Paper Number 2, these two items must appear on the face of the permit. The permit may not simply cite the emissions limits.

The remainder of the matrix should rely heavily on citations to the applicable requirements. Use citations to subpart KK and General Provisions to keep the matrix from becoming too large to be read easily.

Citations should be as detailed as possible. To increase clarity, cite the specific paragraphs and subparagraphs that apply instead of using higher-level references.

Supplement the citations outside the body of the matrix when necessary to clarify the requirements. When it is not clear exactly how a cited requirement should be applied to this facility, provide the details in a footnote or supplemental permit condition.

The matrix should clearly align all the associated compliance, testing, monitoring, recordkeeping, and reporting requirements with each compliance option. Maintain clarity, even at the price of repeating citations that apply to multiple compliance options.

The matrix should include the requirements of subpart KK and General Provisions. This is a good place to resolve any questions about the interface between the subpart and the General Provisions. (See Section 5.4 for information on some such interface issues.)

The matrix should include only those compliance options with a reasonable probability of being used. Narrow down the options as much as possible to save space. However, don't eliminate options that the facility realistically may wish to use during the term of the Title V permit.

The facility must keep records of which compliance option is in use at all times. As with other alternative operating scenarios, the facility must maintain a contemporaneous on-site implementation log to document the current compliance option.

A change among the compliance options in the matrix does <u>not</u> trigger a written notification under §63.9(j). This paragraph of the General Provisions requires a written notification within 15 days after a change in any information already provided in a notification submitted pursuant to §63.9. However, the facility need not submit such a notification if it included the range of compliance options in earlier notifications. (For example, the facility is required to detail its compliance strategy in a Notification of Compliance Status. Be sure that this notification is consistent with the compliance options matrix.)

Figure E-1. Guiding principles for the Compliance Options Matrix approach.

Table E-1. Compliance Options for Publication Rotogravure Presses Printing and Publishing MACT Standard, 40 CFR Part 63, Subpart KK

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Publication Rotogravure presses and affiliated equipmentAll emission points combined 63.821(a)(1)	8 percent of the total volatile matter used each	Liquid-liquid material balance 63.824(b)(1)(i)	Compliance demonstration (monthly) 63.824(b)(1)(i) HAP content analysis 63.827(b)(1) Volatile matter analysis 63.827(c)(1)	Material usage measurements 63.824(b)(1)(i)(A) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1		SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1

Table E-1 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Publication Rotogravure presses and affiliated equipmentAll emission points combined 63.821(a)(1) (cont.)	Limit emissions of organic HAP to no more than	Solvent recovery CEMS		Capture efficiency 63.824 (b)(1)(ii)(D) and 63.828(a)(5) and (b) See footnote 2 CEMS 63.824		Notification of CMS performance evaluation 63.9(g)(1) See footnote 1 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 1
						Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-1 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Publication	Limit emissions of organic	Oxidizer	Capture efficiency test			Notification of CMS
Rotogravure presses and	HAP to no more than		63.827(e)	(b)(2)(i)(E) and	63.829(b)(1) and	performance evaluation
		CPMS	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
	volatile matter used each	63.824(b)(2)(i)	63.827(f) and Appendix A	See footnote 2		See footnote 1
(/ (/	month		of this subpart		CMS records	
(cont.)	63.824(b)			Destruction efficiency	63.829(b)(3) and	Notification of
	(cont.)		Destruction efficiency te		63.10(c)	performance test
			63.827(d)	(b)(2)(i)(E) 63.828(a)(2)(ii) and (b)	See footnote 1	63.830(b)(2) 63.9(e)
			Compliance	and:	General recordkeeping	SSM reports 63.830(b)(5)
			demonstration (monthly)	63.828(a)(4)(i) for	63.10(b)(1) and (2)	63.10(d)(5)
			63.824(b)(2)(i)	noncatalytic		
				63.828(a)(4)(ii) for		Summary reports
			HAP content analysis	catalytic		63.830(b)(6)
			63.827(b)(1)			63.10(e)(3)
			(implied by Eq. 2)	Material usage		
				measurements		Performance test reports
			Volatile matter analysis	63.824(b)(1)(ii)(C)		63.830(b)(4)
			63.827(c)(1)	(implied by Eq. 2)		63.10(d)(2)
			(implied by Eq. 2)	CMC		Other CMS remediate
				CMS requirements 63.8(b), (c), (d), and (e)		Other CMS reporting 63.10(e)
				See footnote 1		See footnote 1
				see jooinole 1		see jooinole 1
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-1 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Publication	Limit emissions of organic	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure presses and	HAP to no more than		63.827(e)	63.824(b)(2)(ii) [cites	63.829(b)(1) and	performance evaluation
		CEMS	or	63.824	63.10(b)(2)	63.9(g)(1)
All emission points	volatile matter used each	63.824(b)(2)(ii)	63.827(f) and Appendix A	(b)(1)(ii)(D)]		See footnote 1
combined 63.821(a)(1)	month		of this subpart	and	CMS records	
(cont.)	63.824(b)			63.828(a)(5) and (b)	63.829(b)(3) and	Notification of
	(cont.)		Compliance	See footnote 2	63.10(c)	performance test
			demonstration (monthly)		See footnote 1	63.830(b)(2) 63.9(e)
			63.824(b)(2)(ii) [cites	CEMS		
			63.824(b)(1)(ii)]	63.824(b)(2)(ii) [cites	General recordkeeping	SSM reports 63.830(b)(5)
				63.824	63.10(b)(1) and (2)	63.10(d)(5)
			HAP content analysis	(b)(1)(ii)(A)		
			63.827(b)(1)	and		Summary reports
			(implied by Eq. 2)	63.828(a)(2)(i) and (a)(3)		63.830(b)(6)
						63.10(e)(3)
			Volatile matter analysis	Material usage		
			63.827(c)(1)	measurements		Performance test reports
			(implied by Eq. 2)	63.824(b)(2)(ii) [cites		63.830(b)(4)
				63.824 (b)(1)(ii)(C)]		63.10(d)(2)
				(implied by Eq. 2)		
						Other CMS reporting
				CMS requirements		63.10(e)
				63.8(b), (c), (d), and (e)		See footnote 1
				See footnote 1		
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-1 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Publication	Limit emissions of organic	No control device	Compliance	Material usage	Measurements	Summary reports
Rotogravure presses and	HAP to no more than		demonstration (monthly)	measurements	63.829(b)(1) and	63.830(b)(6)
affiliated equipment	8 percent of the total	Compliant materials	63.824(b)(3)	63.824(b)(3)(i)	63.10(b)(2)	63.10(e)(3)
All emission points	volatile matter used each	63.824(b)(3)				
combined 63.821(a)(1)	month		HAP content analysis	CMS requirements	General recordkeeping	Notification of
(cont.)	63.824(b)		63.827(b)(1)	63.8(b), (c), (d), and (e)	63.10(b)(1) and (2)	Compliance Status
	(cont.)			See footnote 1		63.830(b)(3)
			Volatile matter analysis		CMS records	63.9(h)
			63.827(c)(1)		63.829(b)(3) and	
					63.10(c)	Notification of CMS
					See footnote 1	performance evaluation
						63.9(g)(1)
						See footnote 1
						J
						Other CMS reporting
						63.10(e)
						See footnote 1

^{1.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

^{2.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

Table E-2. Compliance Options for PPR and WWF Presses under Subpart KK No Control Device - Compliant Coatings Only

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All Product and Packagin Rotogravure (PPR) or Wide-Web Flexographic (WWF) presses All emission points combined 63.821(a)(2)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b)	No control device Each material used contains #0.04 weight fraction organic HAP, as purchased 63.825(b)(1)	Compliance demonstration (monthly) 63.825(b)(1) HAP content analysis 63.827(b)(2)	CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1
		No control device Each solids-containing material used contains #0.04 weight fraction organic HAP, as applied 63.825(b)(2)	Compliance demonstration (monthly) 63.825(b)(2) HAP content analysis 63.827(b)(2)	Material usage measurements 63.825(b)(2)(ii) (implied by Eq. 3) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1

Table E-2 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the	#0.04 weight fraction organic HAP or #0.20kg HAP per kg solids, as applied	Compliance demonstration (monthly) 63.825(b)(3) [cites (b)(2)] HAP content analysis 63.827(b)(2) Solids content analysis 63.827(c)(2)	measurements 63.825(b)(3)(ii) (implied by Eqs. 3 and 4) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e)
			Compliance demonstration (monthly) 63.825(b)(4) HAP content analysis 63.827(b)(2)	measurements 63.825(b)(4) (implied by Eq. 6) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	See footnote 1 Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) See footnote 1 Other CMS reporting 63.10(e) See footnote 1

Table E-2 (continued)

Affected Source	Standard.	Compliance Outline	Performance Testing/ Compliance	Maritania	Describe	Notifications and
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points	month to #5% of the	No control device	Compliance demonstration (monthly)	material usage measurements	Measurements 63.829(b)(1) and	Summary reports 63.830(b)(6)
combined 63.821(a)(2)		Average HAP content q		63.825(b)(5)	63.10(b)(2)	63.10(e)(3)
(cont.)	to #4% of the mass of	materials applied	03.023(0)(3)	(implied by Eq. 7)	03.10(0)(2)	03.10(0)(3)
	materials applied; or to		HAP content analysis		General recordkeeping	Notification of
	#20% of the mass of	solids, as applied	63.827(b)(2)	CMS requirements	63.10(b)(1) and (2)	Compliance Status
	solids applied; or to a	63.825(b)(5)		63.8(b), (c), (d), and (e)		63.830(b)(3)
	calculated equivalent		Solids content analysis	See footnote 1	CMS records	63.9(h)
	allowable mass 63.825(b) (cont.)		63.827(c)(2)		63.829(b)(3) and 63.10(c)	Notification of CMS
	03.823(b) (cont.)				See footnote 1	performance evaluation
					see joomore 1	63.9(g)(1)
						03.7(g)(1)
						Other CMS reporting
						63.10(e)
						See footnote 1
		No control device	Compliance demonstration	_	Measurements	Summary reports
			(monthly)	measurements	63.829(b)(1) and	63.830(b)(6)
		Total HAP applied less	63.825(b)(6) and (e)	63.825(b)(6) (implied by Eq. 8)	63.10(b)(2)	63.10(e)(3)
		than equivalent allowabl HAP	HAP content analysis	63.825(e)	General recordkeeping	Notification of
			63.827(b)(2)	03.023(0)	63.10(b)(1) and (2)	Compliance Status
		03.023(0)(0)		CMS requirements	(-)	63.830(b)(3)
			Solids content analysis	63.8(b), (c), (d), and (e)	CMS records	63.9(h)
			63.827(c)(2)	See footnote 1	63.829(b)(3) and	
					63.10(c)	Notification of CMS
			Calculation of monthly		See footnote 1	performance evaluation
			allowable HAP emissions 63.825(e)(1) - (5)			63.9(g)(1)
			05.625(8)(1) - (5)			Other CMS reporting
						63.10(e)
						See footnote 1

^{1.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-3. Compliance Options for PPR and WWF Presses under Subpart KK Solvent Recovery with 1 Capture System, 1 Control Device, Only Always-Controlled Work Stations Liquid-Liquid Material Balance

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin Rotogravure (PPR) or		Solvent recovery [w/ 1 capture system and	Compliance demonstration (monthly) 63.825(b)(7) 63.825(c)(1)(i), (iii), (v) - (vii), (xi)(A) Volatile matter analysis 63.827(c)(2)	Recovered volatile matter 63.825(c)(1)(v) and (vi) Material usage measurements 63.825(c)(1)(i) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1		SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting
						63.10(e) See footnote 1

Table E-3 (continued)

		Compliance			
Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
emissions for the h to #5% of the ic HAP applied; or % of the mass of ials applied; or to of the mass of applied; or to a lated equivalent able mass 5(b) (cont.)	Solvent recovery (w/ 1 capture system and APCD; only ACWS) Liquid-liquid material balance (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8) 63.825(c)(1)	Compliance demonstration (monthly) 63.825(b)(8) 63.825(c)(1)(i) - (ix) and (xi)(B) HAP content analysis 63.827(b)(2) Solids content analysis 63.827(c)(2) Volatile matter analysis	Recovered volatile matter 63.825(c)(1)(v) and (vi) Material usage measurements 63.825(c)(1)(i) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) Material balances 63.829(c) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e)
h ic ia ia la	to #5% of the c HAP applied; or of the mass of als applied; or to of the mass of applied; or to a ted equivalent ble mass (b) (cont.)	to #5% of the c HAP applied; or of the mass of als applied; or to of the mass of applied; or to a ted equivalent ole mass (b) (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8) 63.825(c)(1)	(w/ 1 capture system and demonstration (monthly) 63.825(b)(8) 63.825(c)(1)(i) - (ix) and (xi)(B) Liquid-liquid material balance (cont.) Monthly average HAP emission rate (b) (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8) Solids content analysis 63.827(c)(2)	to #5% of the to #1 capture system and to #1 capture system and to #2 capture system and to #3.825(b)(8) (w/ 1 capture system and demonstration (monthly) and (vi)	to #5% of the to #AP applied; or of the mass of als applied; or to of the mass of applied; or to a ted equivalent ble mass (b) (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8) Solids content analysis 63.827(c)(2) Material usage measurements 63.825(c)(1)(i) Material usage measurements 63.825(c)(1)(i) CMS requirements 63.8(b), (c), (d), and (e) Solids content analysis 63.827(c)(2) CMS records 63.829(b)(1) and 63.10(b)(2) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1 CMS records 63.829(b)(3) and 63.10(c) See footnote 1

Table E-3 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	APCD; only ACWS) Liquid-liquid material balance (cont.)	Compliance demonstration (monthly) 63.825(b)(9) 63.825(c)(1)(i) - (iii), (v) - (viii), (x), and (xi)(C) HAP content analysis 63.827(b)(2) Volatile matter analysis 63.827(c)(2)	Material usage measurements 63.825(c)(1)(i) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) Material balances 63.829(c) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footmote 1	SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1

Table E-3 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2)		Solvent recovery (w/ 1 capture system and APCD; only ACWS) Liquid-liquid material balance (cont.) Monthly HAP emissions less than calculated allowable emissions 63.825(b)(10)	Compliance demonstration (monthly) 63.825(b)(10) 63.825(c)(1)(i) - (viii) and (xi)(D) Calculation of monthly	Recovered volatile matter 63.825(c)(1)(v) and (vi) Material usage measurements 63.825(c)(1)(i) 63.825(e) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	1 0	Reporting SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation
			63.827(c)(2) Volatile matter analysis 63.827(c)(2)			63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1

^{1.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-4. Compliance Options for PPR and WWF Presses Under Subpart KK Solvent Recovery with 1 Capture System, 1 Control Device, Only Always-Controlled Work Stations Continuous Emissions Monitoring System

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin		Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
	month to #5% of the	[w/ 1 capture system and		63.825(c)(2)(v) and	63.829(b)(1) and	performance evaluation
, ,	organic HAP applied; or	· ·	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
	to #4% of the mass of		63.827(f) and Appendix A		03.10(0)(2)	03.9(g)(1)
All emission points	materials applied; or to	-		see jooinoie 1	CMS records	Notification of
-	#20% of the mass of	stations (ACWS)]	or this subpart	CEMS	63.829(b)(3) and	performance test
. , . ,	solids applied; or to a	stations (rie ws)]	Compliance	63.825(c)(2)(iii) and	63.10(c)	63.830(b)(2) 63.9(e)
	calculated equivalent	CEMS for APCD and	demonstration (monthly)			
	allowable mass	parameter monitoring for			General recordkeeping	SSM reports 63.830(b)(5)
	63.825(b)	capture system		CMS requirements	63.10(b)(1) and (2)	63.10(d)(5)
	. ,		(xi), (xi)(A)	63.8(b), (c), (d), and (e)		. , , , ,
						Summary reports
		95% control				63.830(b)(6)
		63.825(b)(7) 63.825(c)(2)				63.10(e)(3)
						Performance test reports
						63.830(b)(4)
						63.10(d)(2)
						Other CMS reporting 63.10(e)
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-4 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	CEMS for APCD and parameter monitoring for capture system (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8)	or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(8)	CEMS 63.825(c)(2)(iii) and	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-4 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	CEMS for APCD and parameter monitoring for capture system (cont.) Monthly average HAP	or 63.827(f) and Appendix A of this subpart	CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3)

Table E-4 (continued)

Affected Source & Emission Point	Standard Compli	liance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All emission points combined 63.821(a)(2) (cont.) month to organic to #4% material #20% of solids approached allowable combined for the comb	e HAP applied; or of the mass of ls applied; or to of the mass of applied; or to a ted equivalent ble mass b) (cont.) APCD; or of the mass of parameter capture system of the mass of the	or APCD and or MPCD and or MPCD and or monitoring for system (cont.) THAP emissions a calculated de emissions (10) (2)	or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(10) 63.825(c)(2)(i) - (v), (vii) - (viii), and (xi)(D) Calculation of monthly allowable HAP emissions 63.825(e)(1) - (5)	CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(c)(2)(i) 63.825(e)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-5. Compliance Options for PPR and WWF Presses under Subpart KK Solvent Recovery with >1 Capture System and/or >1 APCD, Only Always-Controlled Work Stations Liquid-Liquid Material Balance

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin		Solvent recovery	Compliance	Recovered volatile matter	Measurements	SSM reports 63.830(b)(5)
<i>U</i> , ,	month to #5% of the	[w/>1 capture system	demonstration (monthly)			63.10(d)(5)
Wide-Web Flexographic	organic HAP applied; or	and/or >1 air pollution	63.825(b)(7)		63.10(b)(2)	
(WWF) presses	to #4% of the mass of	control device (APCD);	63.825(h) and (h)(1)	Material usage		Summary reports
	materials applied; or to	only always-controlled	63.825(c)(1)(i), (iii), (v) -	measurements	Material balances	63.830(b)(6)
combined 63.821(a)(2)	#20% of the mass of	work stations (ACWS)]	(vii)	63.825(c)(1)(i)	63.829(c)	63.10(e)(3)
	solids applied; or to a					
	calculated equivalent	Liquid-liquid material	Volatile matter analysis	CMS requirements	General recordkeeping	Notification of
	allowable mass	balance	63.827(c)(2)	63.8(b), (c), (d), and (e)	63.10(b)(1) and (2)	Compliance Status
	63.825(b)			See footnote 1		63.830(b)(3)
		95% control			CMS records	63.9(h)
		63.825(b)(7)			63.829(b)(3) and	
					63.10(c)	Notification of CMS
					See footnote 1	performance evaluation
						63.9(g)(1)
						Other CMS reporting
						63.10(e)
						See footnote 1

Table E-5 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
combined 63.821(a)(2) (cont.)	month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass	Solvent recovery (w/ >1 capture system and/or >1 APCD; only ACWS) Liquid-liquid material balance (cont.) 95% control 63.825(b)(7) (alternative)	Compliance demonstration (monthly) 63.825(b)(7) 63.825(f)(1), (1)(i), (5), (7), and (7)(iv) 63.825(c)(1)(i) - (iii), (v) - (viii) HAP content analysis 63.827(b)(2) Volatile matter analysis 63.827(c)(2)	Material usage measurements 63.825(c)(1)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) Material balances 63.829(c) General recordkeeping 63.10(b)(1) and (2) CMS records 63.829(b)(3) and 63.10(c) See footnote 1	SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e) See footnote 1

Table E-5 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
combined 63.821(a)(2) (cont.)	month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	Solvent recovery (w/ >1 capture system and/or >1 APCD; only ACWS) Liquid-liquid material balance (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied	Compliance demonstration (monthly) 63.825(b)(8) 63.825(f)(1), (1)(i), (5), (6), (7), and (7)(ii) 63.825(c)(1)(i) - (iii), (v) - (viii) HAP content analysis 63.827(b)(2) Solids content analysis 63.827(c)(2) Volatile matter analysis 63.827(c)(2)	Recovered volatile matter 63.825(c)(1)(v) and (vi) Material usage measurements 63.825(c)(1)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1		SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting 63.10(e)

Table E-5 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	Solvent recovery (w/>1 capture system and/or>1 APCD; only ACWS) Liquid-liquid material balance (cont.) Monthly average HAP emission rate #0.04 kg HAP per kg material applied, on as-	Compliance demonstration (monthly) 63.825(b)(9) 63.825(f)(1), (1)(i), (5), (7), and (7)(i)	Recovered volatile matter 63.825(c)(1)(v) and (vi) Material usage measurements 63.825(c)(1)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 1	Measurements	SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Notification of Compliance Status 63.830(b)(3) 63.9(h) Notification of CMS performance evaluation 63.9(g)(1) Other CMS reporting
						63.10(e) See footnote 1

Table E-5 (continued)

Affected Source	~		Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Compliance	Recovered volatile matter	Measurements	SSM reports 63.830(b)(5)
All emission points	month to #5% of the	(w/>1 capture system	demonstration (monthly)	63.825(c)(1)(v) and (vi)	63.829(b)(1) and	63.10(d)(5)
combined 63.821(a)(2)	organic HAP applied; or	and/or >1 APCD; only	63.825(b)(10)		63.10(b)(2)	
(cont.)	to #4% of the mass of	ACWS)	63.825(f)(1), (1)(i), (5),	Material usage		Summary reports
	materials applied; or to		(6), (7), and (7)(iii)	measurements	Material balances	63.830(b)(6)
	#20% of the mass of	Liquid-liquid material	63.825(c)(1)(i) - (iii), (v) -	63.825(c)(1)(i)	63.829(c)	63.10(e)(3)
	solids applied; or to a	balance (cont.)	(viii)	63.825(e)		
	calculated equivalent			63.825(f)(5)	General recordkeeping	Notification of
	allowable mass	Monthly HAP emissions	Calculation of monthly	(implied by Eq. 8)	63.10(b)(1) and (2)	Compliance Status
	63.825(b) (cont.)		allowable HAP emissions			63.830(b)(3)
		allowable emissions	63.825(e)(1) - (5)	CMS requirements	CMS records	63.9(h)
		63.825(b)(10)		63.8(b), (c), (d), and (e)	63.829(b)(3) and	
		63.825(f)(1)	HAP content analysis	See footnote 1	63.10(c)	Notification of CMS
			63.827(b)(2)		See footnote 1	performance evaluation
						63.9(g)(1)
			Solids content analysis			
			63.827(c)(2)			Other CMS reporting
						63.10(e)
			Volatile matter analysis			See footnote 1
			63.827(c)(2)			

^{1.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-6. Compliance Options for PPR and WWF Presses under Subpart KK Solvent Recovery with >1 Capture System and/or >1 APCD, Only Always-Controlled Work Stations Continuous Emissions Monitoring System

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin		Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure (PPR) or	month to #5% of the	[w/>1 capture system	63.827(e)	63.825(h)(2)	63.829(b)(1) and	performance evaluation
Wide-Web Flexographic		and/or >1 air pollution	or	63.825(c)(2)(v) and	63.10(b)(2)	63.9(g)(1)
(WWF) presses	to #4% of the mass of	control device (APCD);	63.827(f) and Appendix A		03.10(0)(2)	03.7(g)(1)
All emission points	materials applied; or to	only always-controlled	of this subpart	See footnote 1	CMS records	Notification of
combined 63.821(a)(2)	#20% of the mass of	work stations (ACWS)]	•		63.829(b)(3) and	performance test
	solids applied; or to a		Compliance	CEMS	63.10(c)	63.830(b)(2) 63.9(e)
	calculated equivalent	CEMS for APCD and	demonstration (monthly)			
	allowable mass	parameter monitoring for		63.828(a)(2)(i) and (a)(3)	General recordkeeping	SSM reports 63.830(b)(5)
	63.825(b)	capture system	63.825(h) and (h)(2)		63.10(b)(1) and (2)	63.10(d)(5)
			63.825(c)(2)(iii), (v), (vii)	CMS requirements		C .
		95% control		63.8(b), (c), (d), and (e)		Summary reports 63.830(b)(6)
		63.825(b)(7)				63.10(e)(3)
						03.10(0)(3)
						Performance test reports
						63.830(b)(4)
						63.10(d)(2)
						Other CMS reporting
						63.10(e)
						N
						Notification of
						Compliance Status 63.830(b)(3)
						63.9(h)
						03.9(11)

Table E-6 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of	ACWS) CEMS for APCD and	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart	See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of
	solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	parameter monitoring for capture system (cont.) 95% control 63.825(b)(7) (alternative)	Compliance demonstration (monthly) 63.825(b)(7) 63.825(f)(2), (2)(i), (2)(ii)(A), (5), (7), and (7)(iv) 63.825(c)(2)(i) - (iii), (v), (viii) HAP content analysis 63.827(b)(2)	CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(c)(2)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 2	63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status

Table E-6 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	ACWS) CEMS for APCD and parameter monitoring for capture system (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(8) 63.825(f)(2), (2)(i), (2)(ii)(A), (5), (6), (7), and (7)(ii) 63.825(c)(2)(i) - (iii), (v), (viii) HAP content analysis 63.827(b)(2) Solids content analysis 63.827(c)(2)	See footnote 1 CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-6 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the	Monthly average HAP emission rate #0.04 kg HAP per kg	of this subpart	Capture efficiency 63.825(f)(2)(i), 63.825(c)(2)(v), and 63.828(a)(5) and (b) See footnote 1 CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(c)(2)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 2	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-6 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/>1 capture system	63.827(e)	63.825(f)(2)(i),	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or		or	63.825(c)(2)(v), and	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of	ACWS)	63.827(f) and Appendix A	63.828(a)(5) and (b)		See footnote 2
	materials applied; or to		of this subpart	See footnote 1	CMS records	
	#20% of the mass of	CEMS for APCD and			63.829(b)(3) and	Notification of
	solids applied; or to a	parameter monitoring for	Compliance	CEMS	63.10(c)	performance test
	calculated equivalent	capture system (cont.)	demonstration (monthly)		See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.825(b)(10)	63.828(a)(2)(i) and (a)(3)		
	63.825(b) (cont.)	Monthly HAP emissions	63.825(f)(2), (2)(i),		General recordkeeping	SSM reports 63.830(b)(5)
		less than calculated	(2)(ii)(A), (5), (6), (7), and	_	63.10(b)(1) and (2)	63.10(d)(5)
			(7)(iii)	measurements		
		\	63.825(c)(2)(i) - (iii), (v),	63.825(c)(2)(i)		Summary reports
		63.825(f)(2)	(viii)	63.825(e)		63.830(b)(6)
				63.825(f)(5)		63.10(e)(3)
			Calculation of monthly	(implied by Eq. 8)		
			allowable HAP emissions			Performance test reports
			63.825(e)(1) - (5)			63.830(b)(4)
				CMS requirements		63.10(d)(2)
			HAP content analysis	63.8(b), (c), (d), and (e)		
			63.827(b)(2)	See footnote 2		Other CMS reporting
						63.10(e)
			Solids content analysis			See footnote 2
			63.827(c)(2)			
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-7. Compliance Options for PPR and WWF Presses under Subpart KK Solvent Recovery with \$1 Never-Controlled WS and/or \$1 Intermittently-Controllable WS Liquid-Liquid Material Balance

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin	J imit emissions for the	Solvent recovery	Compliance	Intermittently-controllable		SSM reports 63.830(b)(5)
Rotogravure (PPR) or	month to #5% of the	[w/\$1 never-controlled	demonstration (monthly)	<u>-</u>	63.829(b)(1) and	63.10(d)(5)
Wide-Web Flexographic		-	63.825(b)(7)	` '	63.10(b)(2)	
(WWF) presses	to #4% of the mass of	and/or \$1 intermittently-	` ' ` '	and		Summary reports
All emission points	materials applied; or to	controllable work station	s(7), and (7)(iv)	63.828(a)(1)(i), (ii), (iii),	Material balances	63.830(b)(6)
combined 63.821(a)(2)	#20% of the mass of	(ICWS)]	63.825(c)(1)(ii), (iii), (v),	or (iv)	63.829(c)	63.10(e)(3)
	solids applied; or to a		and (vi)			
	calculated equivalent	Liquid-liquid material	63.825(g)(1) - (5)	Recovered volatile matter	General recordkeeping	Notification of
	allowable mass	balance		63.825(c)(1)(v) and (vi)	63.10(b)(1) and (2)	Compliance Status
	63.825(b)		HAP content analysis			63.830(b)(3)
		95% control	63.827(b)(2)	<u>o</u>	CMS records	63.9(h)
		63.825(b)(7)			63.829(b)(3) and	
		63.825(f)(1)	Volatile matter analysis	63.825(g)	63.10(c)	Notification of CMS
			63.827(c)(2)	63.825(f)(5)	See footnote 1	performance evaluation
				(implied by Eq. 8)		63.9(g)(1)
				CMS requirements		Other CMS reporting
				63.8(b), (c), (d), and (e)		63.10(e)
				See footnote 1		See footnote 1

Table E-7 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Compliance	Intermittently-controllable	Measurements	SSM reports 63.830(b)(5)
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	demonstration (monthly)	work station(s)	63.829(b)(1) and	63.10(d)(5)
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	63.825(b)(8)	63.828(a)(1)	63.10(b)(2)	
(cont.)	to #4% of the mass of		63.825(f)(1), (1)(ii), (5),	and		Summary reports
	materials applied; or to	Liquid-liquid material	(6), (7), and (7)(ii)	63.828(a)(1)(i), (ii), (iii),	Material balances	63.830(b)(6)
	#20% of the mass of	balance (cont.)	63.825(c)(1)(ii), (iii), (v),	or (iv)	63.829(c)	63.10(e)(3)
	solids applied; or to a		and (vi)			
	calculated equivalent	Monthly average HAP	63.825(g)(1) - (5)	Recovered volatile matter	General recordkeeping	Notification of
	allowable mass	emission rate		63.825(c)(1)(v) and (vi)	63.10(b)(1) and (2)	Compliance Status
	63.825(b) (cont.)	#0.20 kg HAP per kg	HAP content analysis			63.830(b)(3)
		solids, as applied	63.827(b)(2)	Material usage	CMS records	63.9(h)
		63.825(b)(8)		measurements	63.829(b)(3) and	
		63.825(f)(1)	Solids content analysis	63.825(g)	63.10(c)	Notification of CMS
			63.827(c)(2)	63.825(f)(5)	See footnote 1	performance evaluation
				(implied by Eq. 8)		63.9(g)(1)
			Volatile matter analysis			
			63.827(c)(2)	CMS requirements		Other CMS reporting
				63.8(b), (c), (d), and (e)		63.10(e)
				See footnote 1		See footnote 1

Table E-7 (continued)

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Compliance	Intermittently-controllable	Measurements	SSM reports 63.830(b)(5)
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	demonstration (monthly)	work station(s)	63.829(b)(1) and	63.10(d)(5)
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	63.825(b)(9)	63.828(a)(1)	63.10(b)(2)	
(cont.)	to #4% of the mass of		63.825(f)(1), (1)(ii), (5),	and		Summary reports
	materials applied; or to	Liquid-liquid material	(7), and (7)(i)	63.828(a)(1)(i), (ii), (iii),	Material balances	63.830(b)(6)
	#20% of the mass of	balance (cont.)	63.825(c)(1)(ii), (iii), (v),	or (iv)	63.829(c)	63.10(e)(3)
	solids applied; or to a		and (vi)			
	calculated equivalent	Monthly average HAP	63.825(g)(1) - (5)	Recovered volatile matter	General recordkeeping	Notification of
	allowable mass	emission rate		63.825(c)(1)(v) and (vi)	63.10(b)(1) and (2)	Compliance Status
	63.825(b) (cont.)		HAP content analysis			63.830(b)(3)
		material applied, on as-	63.827(b)(2)	ŭ		63.9(h)
		applied basis			63.829(b)(3) and	
		63.825(b)(9)	Volatile matter analysis	ν.Ο΄	63.10(c)	Notification of CMS
		63.825(f)(1)	63.827(c)(2)	63.825(f)(5)	See footnote 1	performance evaluation
				(implied by Eq. 8)		63.9(g)(1)
				G3.5G		
				CMS requirements		Other CMS reporting
				63.8(b), (c), (d), and (e)		63.10(e)
				See footnote 1		See footnote 1

Table E-7 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Compliance	Intermittently-controllable	Measurements	SSM reports 63.830(b)(5)
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	demonstration (monthly)	work station(s)	63.829(b)(1) and	63.10(d)(5)
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	63.825(b)(10)	63.828(a)(1)	63.10(b)(2)	
(cont.)	to #4% of the mass of		63.825(f)(1), (1)(ii), (5),	and		Summary reports
	materials applied; or to	Liquid-liquid material	(6), (7), and (7)(iii)	63.828(a)(1)(i), (ii), (iii),	Material balances	63.830(b)(6)
	#20% of the mass of	balance (cont.)	63.825(c)(1)(ii), (iii), (v),	or (iv)	63.829(c)	63.10(e)(3)
	solids applied; or to a		and (vi)			
	calculated equivalent	Monthly HAP emissions	63.825(g)(1) - (5)	Recovered volatile matter	General recordkeeping	Notification of
	allowable mass	less than calculated		63.825(c)(1)(v) and (vi)	63.10(b)(1) and (2)	Compliance Status
	63.825(b) (cont.)		Calculation of monthly			63.830(b)(3)
			allowable HAP emissions	_		63.9(h)
		63.825(f)(1)	63.825(e)(1) - (5)	measurements	63.829(b)(3) and	
				` '	63.10(c)	Notification of CMS
			HAP content analysis	63.825(g)	See footnote 1	performance evaluation
			63.827(b)(2)	63.825(f)(5)		63.9(g)(1)
				(implied by Eq. 8)		
			Solids content analysis	G) (G		Other CMS reporting
			63.827(c)(2)	CMS requirements		63.10(e)
			W-1-4:1441 ·	63.8(b), (c), (d), and (e)		See footnote 1
			Volatile matter analysis 63.827(c)(2)	See footnote 1		

^{1.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-8. Compliance Options for PPR And WWF Presses under Subpart KK Solvent Recovery with \$1 Never-Controlled WS and/or \$1 Intermittently-Controllable WS Continuous Emissions Monitoring System

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin		Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
` ,	month to #5% of the	[w/\$1 never-controlled	63.827(e)	63.825(f)(2)(i),	63.829(b)(1) and	performance evaluation
	organic HAP applied; or		or		63.10(b)(2)	63.9(g)(1)
	to #4% of the mass of		63.827(f) and Appendix A			See footnote 2
-	materials applied; or to	controllable work station	sof this subpart	See footnote 1	CMS records	N
combined 63.821(a)(2)	#20% of the mass of	(ICWS)]	G 1'	GD) (G	63.829(b)(3) and	Notification of
	solids applied; or to a	G-1.5G & 1.5G5	Compliance	CEMS	63.10(c)	performance test
	calculated equivalent	CEMS for APCD and	demonstration (monthly)		See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	parameter monitoring for		63.828(a)(2)(i) and (a)(3)		5000 A V 50
	63.825(b)	capture system	63.825(f)(2), (2)(i),		General recordkeeping	SSM reports 63.830(b)(5)
			(2)(ii)(B), (5), (7), and	Intermittently-controllable	63.10(b)(1) and (2)	63.10(d)(5)
		95% control	(7)(iv)	work station(s)		
		63.825(b)(7)	63.825(c)(2)(ii), (iii), and	63.828(a)(1)		Summary reports
		63.825(f)(2)	(v)	and		63.830(b)(6)
			63.825(g)(1) - (4) and (6)	63.828(a)(1)(i), (ii), (iii), or (iv)		63.10(e)(3)
			HAP content analysis			Performance test reports
			63.827(b)(2)	Material usage		63.830(b)(4)
				measurements		63.10(d)(2)
				63.825(g)		
				63.825(f)(5)		Other CMS reporting
				(implied by Eq. 8)		63.10(e)
						See footnote 2
				CMS requirements		
				63.8(b), (c), (d), and (e)		Notification of
				See footnote 2		Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-8 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses		Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	2	63.827(e)		63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	or	(/ (/ / / / /	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A			See footnote 2
	materials applied; or to	CEMS for APCD and	of this subpart	See footnote 1	CMS records	
	#20% of the mass of	parameter monitoring for			63.829(b)(3) and	Notification of
	solids applied; or to a	capture system (cont.)	Compliance		63.10(c)	performance test
	calculated equivalent		demonstration (monthly)		See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.825(b)(8)	63.828(a)(2)(i) and (a)(3)	C 1 11 '	SSM 4 62 920(1)(5)
	63.825(b) (cont.)		63.825(f)(2), (2)(i),	T-+:+++1+11-1-1	General recordkeeping	SSM reports 63.830(b)(5)
		#0.20 kg HAP per kg	(7)(ii)	Intermittently-controllable work station(s)	65.10(b)(1) and (2)	63.10(d)(5)
		, _F	63.825(c)(2)(ii), (iii), and	63.828(a)(1)		Summary reports
			(v)	03.020(a)(1) and		63.830(b)(6)
		63.825(f)(2)	` /	63.828(a)(1)(i), (ii), (iii),		63.10(e)(3)
			03.823(g)(1) - (4) and (0)	or (iv)		03.10(c)(3)
			HAP content analysis	or (iv)		Performance test reports
			63.827(b)(2)	Material usage		63.830(b)(4)
			00.027(0)(2)	measurements		63.10(d)(2)
			Solids content analysis	63.825(g)		
			63.827(c)(2)	63.825(f)(5)		Other CMS reporting
				(implied by Eq. 8)		63.10(e)
						See footnote 2
				CMS requirements		
				63.8(b), (c), (d), and (e)		Notification of
				See footnote 2		Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-8 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses		Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the		63.827(e)		63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	or	(/ (/ / / / /	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of	OFF FOR A LINCOLD I	63.827(f) and Appendix A		C) (C)	See footnote 2
	materials applied; or to	CEMS for APCD and	of this subpart	See footnote 1	CMS records	NT .: C: .: .
	#20% of the mass of	parameter monitoring for			63.829(b)(3) and	Notification of
	solids applied; or to a	capture system (cont.)	Compliance		63.10(c)	performance test
	calculated equivalent allowable mass		demonstration (monthly)		See footnote 2	63.830(b)(2) 63.9(e)
	63.825(b) (cont.)		63.825(b)(9) 63.825(f)(2), (2)(i),	63.828(a)(2)(i) and (a)(3)	General recordkeeping	SSM reports 63.830(b)(5)
	, , , ,		(2)(ii)(B), (5), (7), and	Intermittently-controllable	1 0	63.10(d)(5)
		#0.04 kg HAP per kg	(7)(i)	work station(s)	03.10(b)(1) and (2)	03.10(d)(3)
			63.825(c)(2)(ii), (iii), and	63.828(a)(1)		Summary reports
		63.825(b)(9)	(v)	and		63.830(b)(6)
		63.825(f)(2)	` /	63.828(a)(1)(i), (ii), (iii),		63.10(e)(3)
		03.823(1)(2)	03.023(g)(1) (1) and (0)	or (iv)		05.10(0)(3)
			HAP content analysis	01 (11)		Performance test reports
			63.827(b)(2)	Material usage		63.830(b)(4)
				measurements		63.10(d)(2)
				63.825(g)		, , , ,
				63.825(f)(5)		Other CMS reporting
				(implied by Eq. 8)		63.10(e)
						See footnote 2
				CMS requirements		
				63.8(b), (c), (d), and (e)		Notification of
				See footnote 2		Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-8 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Solvent recovery	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	63.827(e)	63.825(f)(2)(i),	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	or	63.825(c)(2)(v), and	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	63.828(a)(5) and (b)		See footnote 2
	materials applied; or to	CEMS for APCD and	of this subpart	See footnote 1	CMS records	
	#20% of the mass of	parameter monitoring for			63.829(b)(3) and	Notification of
	solids applied; or to a	capture system (cont.)	Compliance		63.10(c)	performance test
	calculated equivalent		demonstration (monthly)	63.825(c)(2)(iii) and	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	Monthly HAP emissions	63.825(b)(10)	63.828(a)(2)(i) and (a)(3)		
	63.825(b) (cont.)		63.825(f)(2), (2)(i),		General recordkeeping	SSM reports 63.830(b)(5)
		allowable emissions		Intermittently-controllable	63.10(b)(1) and (2)	63.10(d)(5)
			(7)(iii)	work station(s)		
		63.825(f)(2)		63.828(a)(1)		Summary reports
			(v)	and		63.830(b)(6)
			63.825(g)(1) - (4) and (6)	63.828(a)(1)(i), (ii), (iii), or (iv)		63.10(e)(3)
			Calculation of monthly			Performance test reports
			allowable HAP emissions	Material usage		63.830(b)(4)
			63.825(e)(1) - (5)	measurements		63.10(d)(2)
				63.825(e)		
			HAP content analysis	63.825(g)		Other CMS reporting
			63.827(b)(2)	63.825(f)(5)		63.10(e)
				(implied by Eq. 8)		See footnote 2
			Solids content analysis			
			63.827(c)(2)	CMS requirements		Notification of
				63.8(b), (c), (d), and (e)		Compliance Status
				See footnote 2		63.830(b)(3)
						63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-9. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with 1 Capture System, 1 Control Device, Only Always-Controlled Work Stations Continuous Parameter Monitoring Systems

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin Rotogravure (PPR) or Wide-Web Flexographic (WWF) pressesAll emission points combined 63.821(a)(2)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b)	device (APCD); only always-controlled work stations (ACWS)]	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart Oxidizer destruction efficiency test 63.827(d) or test waived per 63.827(a)(2) [citing 63.7(e)(2)(iv) or 63.7(h)] Compliance demonstration (monthly) 63.825(b)(7) 63.825(d)(1)(iii), (x), (xi), and (xi)(A)	Destruction efficiency 63.825(d)(1)(x), 63.828(a)(2)(ii) and (b), and:63.828(a)(4)(i) for noncatalytic63.828(a)(4)(ii) for catalytic CMS requirements 63.8(b), (c), (d), and (e)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-9 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ 1 capture system and	63.827(e)	63.825(d)(1)(x) and	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	APCD; only ACWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	See footnote 1		See footnote 2
	materials applied; or to	CPMS for APCD and	of this subpart		CMS records	
	#20% of the mass of	capture system (cont.)		Destruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		Oxidizer destruction	63.825(d)(1)(x),	63.10(c)	performance test
	calculated equivalent	Monthly average HAP	efficiency test	63.828(a)(2)(ii) and (b),	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.827(d)	and:		
	63.825(b) (cont.)	#0.20 kg HAP per kg	or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		solids, as applied	test waived per	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(8)	63.827(a)(2)	63.828(a)(4)(ii) for		
		63.825(d)(1)	[per 63.7(e)(2)(iv) or	catalytic		Summary reports
			63.7(h)]			63.830(b)(6)
				Material usage		63.10(e)(3)
			Compliance	measurements		- a
			demonstration (monthly)	63.825(d)(1)(iv)		Performance test reports
			63.825(b)(8)	G) (G		63.830(b)(4)
			63.825(d)(1)(iv) - (viii),	CMS requirements		63.10(d)(2)
			(x), (xi) , and $(xi)(B)$	63.8(b), (c), (d), and (e)		ou greg
			TIAD 1 .	See footnote 2		Other CMS reporting
			HAP content analysis			63.10(e)
			63.827(b)(2)			See footnote 2
			Solids content analysis			Notification of
			63.827(c)(2)			Compliance Status
			· · · · · · · · · · · · · · · · · · ·			63.830(b)(3)
						63.9(h)

Table E-9 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses		Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ 1 capture system and	63.827(e)	63.825(d)(1)(x) and	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)		APCD; only ACWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	See footnote 1		See footnote 2
	* * '	CPMS for APCD and	of this subpart		CMS records	
	#20% of the mass of	capture system (cont.)		Destruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		Oxidizer destruction	63.825(d)(1)(x),	63.10(c)	performance test
	calculated equivalent	Monthly average HAP	efficiency test	63.828(a)(2)(ii) and (b),	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.827(d)	and:		GG3.5
	63.825(b) (cont.)	# 0.04 kg IIII per kg	or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		material applica, on as	test waived per	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		or r	63.827(a)(2)	63.828(a)(4)(ii) for		Summany non-outs
		63.825(b)(9)	[per 63.7(e)(2)(iv) or 63.7(h)]	catalytic		Summary reports 63.830(b)(6)
		63.825(d)(1)	03.7(11)]	Material usage		63.10(e)(3)
			Compliance	measurements		03.10(e)(3)
			demonstration (monthly)			Performance test reports
			63.825(b)(9)	03.023(4)(1)(11)		63.830(b)(4)
			63.825(d)(1)(iv), (v), (vii),	CMS requirements		63.10(d)(2)
			(ix) - (xi) , and $(xi)(C)$	63.8(b), (c), (d), and (e)		05.110(4)(2)
			(11) (11), and (11)(0)	See footnote 2		Other CMS reporting
			HAP content analysis	~~~ <i>J</i> ~ ~ · · · · · · · · · ·		63.10(e)
			63.827(b)(2)			See footnote 2
						,
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-9 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ 1 capture system and	63.827(e)	63.825(d)(1)(x) and	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	APCD; only ACWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	See footnote 1		See footnote 2
	materials applied; or to	CPMS for APCD and			CMS records	
	#20% of the mass of	capture system (cont.)	Destruction efficiency te	sDestruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		63.827(d) {or	63.825(d)(1)(x),	63.10(c)	performance test
	calculated equivalent	Monthly HAP emissions	test waived per	63.828(a)(2)(ii) and (b),	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.827(a)(2)	and:		
	63.825(b) (cont.)	allowable emissions	[per $63.7(e)(2)(iv)$ or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		63.825(b)(10)	63.7(h)]}	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(d)(1)		63.828(a)(4)(ii) for		
			Compliance	catalytic		Summary reports
			demonstration (monthly)			63.830(b)(6)
			63.825(b)(10)	Material usage		63.10(e)(3)
			63.825(d)(1)(iv) - (vii),	measurements		
			(x), (xi) , and $(xi)(D)$	63.825(d)(1)(iv)		Performance test reports
				63.825(e)		63.830(b)(4)
			Monthly allowable HAP			63.10(d)(2)
			emissions	CMS requirements		
			63.825(e)(1) - (5)	63.8(b), (c), (d), and (e)		Other CMS reporting
				See footnote 2		63.10(e)
			HAP content analysis			See footnote 2
			63.827(b)(2)			
						Notification of
			Solids content analysis			Compliance Status
			63.827(c)(2)			63.830(b)(3)
						63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-10. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with 1 Capture System, 1 Control Device, Only Always-Controlled Work Stations Continuous Emissions Monitoring System

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin		Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure (PPR) or	month to #5% of the	[w/ 1 capture system and	63.827(e)	63.825(d)(2),	63.829(b)(1) and	performance evaluation
	organic HAP applied; or		or	63.825(c)(2)(v),	63.10(b)(2)	63.9(g)(1)
` ' 1	to #4% of the mass of		63.827(f) and Appendix A			
•	materials applied; or to	•	of this subpart	63.828(a)(5) and (b)	CMS records	Notification of
` / ` /	#20% of the mass of	stations		See footnote 1	63.829(b)(3) and	performance test
	solids applied; or to a	(ACWS)]	Compliance		63.10(c)	63.830(b)(2) 63.9(e)
	calculated equivalent		demonstration (monthly)			
	allowable mass		63.825(b)(7)	63.825(d)(2)	General recordkeeping	SSM reports 63.830(b)(5)
	63.825(b)	parameter monitoring for		63.825(c)(2)(iii) and	63.10(b)(1) and (2)	63.10(d)(5)
		capture system		63.828(a)(2)(i) and (a)(3)		
			(xi), and $(xi)(A)$	CMC :		Summary reports
		95% control		CMS requirements		63.830(b)(6)
		63.825(b)(7)		63.8(b), (c), (d), and (e)		63.10(e)(3)
		63.825(d)(2)				Performance test reports
						63.830(b)(4)
						63.10(d)(2)
						03.10(d)(2)
						Other CMS reporting
						63.10(e)
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-10 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the	CEMS for APCD and parameter monitoring for capture system (cont.) Monthly average HAP emission rate #0.20 kg HAP per kg	or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(8) 63.825(d)(2)	Capture efficiency 63.825(d)(2), 63.825(c)(2)(v), and 63.828(a)(5) and (b) See footnote 1 CEMS 63.825(d)(2) 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(d)(2) 63.825(c)(2)(i) CMS requirements 63.8(b), (c), (d), and (e) See footnote 2	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-10 (continued)

All emission points combined 63.821(a)(2) month to #5% of the organic HAP applied; or to (cont.) month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.) monthly average HAP emission rate (w/ 1 capture system and 63.827(e) or 63.825(d)(2), 63.82	Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
material applied, on asapplied basis 63.825(b)(9) 63.825(d)(2) HAP content analysis 63.825(d)(2) HAP content analysis 63.825(d)(2) CMS requirements 63.830(b)(6) 63.825(c)(2)(i) Performance test rep CMS requirements 63.830(b)(4) 63.80(b), (c), (d), and (e) See footnote 2	All PPR or WWF pressesAll emission points combined 63.821(a)(2)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass	Oxidizer (w/ 1 capture system and APCD; only ACWS) CEMS for APCD and parameter monitoring for capture system (cont.) Monthly average HAP emission rate #0.04 kg HAP per kg material applied, on asapplied basis 63.825(b)(9)	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(9) 63.825(d)(2) 63.825(c)(2)(i) - (iii), (v), (viii), (x), (xi), and (xi)(C) HAP content analysis	Capture efficiency 63.825(d)(2), 63.825(c)(2)(v), and 63.828(a)(5) and (b) See footnote 1 CEMS 63.825(d)(2) 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(d)(2) 63.825(c)(2)(i) CMS requirements 63.8(b), (c), (d), and (e)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status

Table E-10 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ 1 capture system and	63.827(e)	63.825(d)(2),	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	APCD; only ACWS)	or	63.825(c)(2)(v),	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	and		See footnote 2
	materials applied; or to	CEMS for APCD and		63.828(a)(5) and (b)	CMS records	
	#20% of the mass of	parameter monitoring for	Compliance	See footnote 1	63.829(b)(3) and	Notification of
	solids applied; or to a	capture system (cont.)	demonstration (monthly)		63.10(c)	performance test
	calculated equivalent		63.825(b)(10)	CEMS	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	Monthly HAP emissions	63.825(d)(2)	63.825(d)(2)		
		less than calculated	63.825(c)(2)(i) - (v), (viii),	63.825(c)(2)(iii) and	General recordkeeping	SSM reports 63.830(b)(5)
		allowable emissions	(xi), and (xi)(D)	63.828(a)(2)(i) and (a)(3)	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(10)				
		63.825(d)(2)	Monthly allowable HAP	· ·		Summary reports
			emissions	measurements		63.830(b)(6)
			63.825(e)(1) - (5)	63.825(d)(2)		63.10(e)(3)
				63.825(c)(2)(i)		
			HAP content analysis	63.825(e)		Performance test reports
			63.827(b)(2)			63.830(b)(4)
				CMS requirements		63.10(d)(2)
			Solids content analysis	63.8(b), (c), (d), and (e)		
			63.827(c)(2)	See footnote 2		Other CMS reporting
						63.10(e)
						See footnote 2
						NI C'C' C
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-11. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with >1 Capture System and/or >1 Control Device, Only Always-Controlled Work Stations Continuous Parameter Monitoring Systems

Affected Source			Performance Testing/ Compliance			
& Emission Point	Standard	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure (PPR) or	month to #5% of the	[w/>1 capture system	63.827(e)	63.825(h)(3)	63.829(b)(1) and	performance evaluation
	organic HAP applied; or		or	63.825(d)(1)(x) and	63.10(b)(2)	63.9(g)(1)
· / 1	to #4% of the mass of	control device (APCD);	63.827(f) and Appendix A	63.828(a)(5) and (b)		
All emission points	materials applied; or to	only always-controlled	of this subpart	See footnote 1	CMS records	Notification of
combined 63.821(a)(2)	#20% of the mass of	work stations (ACWS)]			63.829(b)(3) and	performance test
	solids applied; or to a		Oxidizer destruction	Destruction efficiency	63.10(c)	63.830(b)(2) 63.9(e)
	calculated equivalent	CPMS for APCD and	efficiency test	63.825(h)(3)	See footnote 2	
	allowable mass	capture system	63.827(d)	63.825(d)(1)(x),		SSM reports 63.830(b)(5)
	63.825(b)	l	or	63.828(a)(2)(ii) and (b),	General recordkeeping	63.10(d)(5)
		95% control	test waived per	and:	63.10(b)(1) and (2)	_
		63.825(b)(7)	63.827(a)(2)	63.828(a)(4)(i) for		Summary reports
			[citing 63.7(e)(2)(iv) or	noncatalytic		63.830(b)(6)
			63.7(h)]	63.828(a)(4)(ii) for catalytic		63.10(e)(3)
			Compliance			Performance test reports
			demonstration (monthly)	CMS requirements		63.830(b)(4)
			63.825(b)(7)	63.8(b), (c), (d), and (e)		63.10(d)(2)
			63.825(h) and (h)(3)			
			63.825(d)(1)(iii) and (x)			Other CMS reporting
						63.10(e)
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-11 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)		Oxidizer (w/>1 capture system	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart Oxidizer destruction efficiency test 63.827(d) or test waived per 63.827(a)(2) [citing 63.7(e)(2)(iv) or 63.7(h)] Compliance demonstration (monthly) 63.825(b)(7) 63.825(f)(3), (3)(i), (3)(ii), (3)(iii), (3)(iii)(A), (5), (7), and (7)(iv) 63.825(d)(1)(iv), (v), and (vii) HAP content analysis	Capture efficiency 63.825(f)(3)(ii) 63.828(a)(5) and (b) See footnote 1 Destruction efficiency 63.825(f)(3)(i) 63.828(a)(2)(ii) and (b) and:63.828(a)(4)(i) for noncatalytic63.828(a)(4)(ii) for catalytic Material usage measurements	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of
			63.827(b)(2)			Compliance Status 63.830(b)(3) 63.9(h)

Table E-11 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/>1 capture system	63.827(e)	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	and/or >1 APCD; only	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of	ACWS)	63.827(f) and Appendix A	See footnote 1		See footnote 2
	materials applied; or to				CMS records	
	#20% of the mass of	CPMS for APCD and	Destruction efficiency te	sDestruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a	capture system	63.827(d)	63.825(f)(3)(i)	63.10(c)	performance test
	calculated equivalent		or	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	Monthly average HAP	test waived per	and:		
	63.825(b) (cont.)	emission rate	63.827(a)(2)	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		#0.20 kg HAP per kg	[per 63.7(e)(2)(iv) or	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		solids, as applied	63.7(h)]	63.828(a)(4)(ii) for		
		63.825(b)(8)		catalytic		Summary reports
		63.825(f)(3)	Compliance			63.830(b)(6)
			demonstration (monthly)	_		63.10(e)(3)
			63.825(b)(8)	measurements		
			63.825(f)(3), (3)(i), (3)(ii),	63.825(d)(1)(iv)		Performance test reports
			(3)(iii)(A), (5), (6), (7),	63.825(f)(5)		63.830(b)(4)
			and (7)(ii)	(implied by Eq. 8)		63.10(d)(2)
			63.825(d)(1)(iv), (v), and			
			(vii)	CMS requirements		Other CMS reporting
				63.8(b), (c), (d), and (e)		63.10(e)
			HAP content analysis	See footnote 2		See footnote 2
			63.827(b)(2)			
			.			Notification of
			Solids content analysis			Compliance Status
			63.827(c)(2)			63.830(b)(3)
						63.9(h)

Table E-11 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points	Limit emissions for the month to #5% of the	Oxidizer (w/>1 capture system	Capture efficiency test 63.827(e)	Capture efficiency 63.825(f)(3)(ii)	Measurements 63.829(b)(1) and	Notification of CMS performance evaluation
combined 63.821(a)(2)	organic HAP applied; or		or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of materials applied; or to	ACWS)	63.827(f) and Appendix A		CMS records	See footnote 2
	#20% of the mass of	CPMS for APCD and	Destruction efficiency te	-	63.829(b)(3) and	Notification of
	solids applied; or to a calculated equivalent	capture system	63.827(d) or	63.825(f)(3)(i) 63.828(a)(2)(ii) and (b)	63.10(c) See footnote 2	performance test 63.830(b)(2) 63.9(e)
	allowable mass	Monthly average HAP	test waived per	and:		
	63.825(b) (cont.)	emission rate	63.827(a)(2)	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		#0.04 kg HAP per kg	[per 63.7(e)(2)(iv) or	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		material applied, on as-	63.7(h)]	63.828(a)(4)(ii) for		
		applied basis		catalytic		Summary reports
		63.825(b)(9)	Compliance			63.830(b)(6)
		63.825(f)(3)	demonstration (monthly)	, and the second		63.10(e)(3)
			63.825(b)(9)	measurements		
				63.825(d)(1)(iv)		Performance test reports
			(3)(iii)(A), (5), (7), and	63.825(f)(5)		63.830(b)(4)
			(7)(i)	(implied by Eq. 8)		63.10(d)(2)
			63.825(d)(1)(iv), (v), and	CMS requirements		Other CMS reporting
			(vii)	63.8(b), (c), (d), and (e)		63.10(e)
			HAP content analysis	See footnote 2		See footnote 2
			63.827(b)(2)	See Jooinoie 2		See jooinoie 2
			03.027(0)(2)			Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

Table E-11 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses		Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/>1 capture system	63.827(e) [or	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)		and/or >1 APCD; only	63.827(f) and Appendix	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of	ACWS)	A]	See footnote 1		See footnote 2
	materials applied; or to				CMS records	
	#20% of the mass of	CPMS for APCD and	Destruction efficiency te	sDestruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a	capture system	63.827(d) {or	63.825(f)(3)(i)	63.10(c)	performance test
	calculated equivalent		test waived per	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	Monthly HAP emissions	63.827(a)(2)	and:		
	63.825(b) (cont.)	less than calculated	[per 63.7(e)(2)(iv) or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		allowable emissions,	63.7(h)]}	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(10)		63.828(a)(4)(ii) for		
		63.825(f)(3)	Compliance	catalytic		Summary reports
			demonstration (monthly)			63.830(b)(6)
			63.825(b)(10)	Material usage		63.10(e)(3)
			63.825(f)(3), (3)(i), (3)(ii),	measurements		
			(3)(iii)(A), (5), (6), (7),	63.825(d)(1)(iv)		Performance test reports
			(7)(iii)	63.825(e)		63.830(b)(4)
			63.825(d)(1)(iv), (v), and			63.10(d)(2)
			(vii)	(implied by Eq. 8)		
						Other CMS reporting
			Monthly allowable HAP	-		63.10(e)
			emissions	63.8(b), (c), (d), and (e)		See footnote 2
			63.825(e)(1) - (5)	See footnote 2		
						Notification of
			HAP content analysis			Compliance Status
			63.827(b)(2)			63.830(b)(3)
						63.9(h)
			Solids content analysis			
			63.827(c)(2)			

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-12. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with >1 Capture System and/or >1 Control Device, Only Always-Controlled Work Stations Continuous Emissions Monitoring System

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin Rotogravure (PPR) or		Oxidizer [w/>1 capture system	Capture efficiency test 63.827(e)	Capture efficiency 63.825(h)(2), 63.825(c)(2)(v),	Measurements 63.829(b)(1) and 63.10(b)(2)	Notification of CMS performance evaluation 63.9(g)(1)
(WWF) pressesAll emission points	to #4% of the mass of materials applied; or to #20% of the mass of	control device (APCD); only always-controlled work stations (ACWS)]	63.827(f) and Appendix A of this subpart		CMS records 63.829(b)(3) and	Notification of performance test
(,,(,,	solids applied; or to a calculated equivalent allowable mass	CEMS for APCD and parameter monitoring for	Compliance demonstration (monthly) 63.825(b)(7)		63.10(c) General recordkeeping	63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5)
	63.825(b)	capture system 95% control	63.825(h) and (h)(2) 63.825(c)(2)(iii), (v), and (vii)	63.825(a)(2)(iii) and 63.828(a)(2)(i) and (a)(3)	63.10(b)(1) and (2)	63.10(d)(5) Summary reports
		63.825(b)(7)	()	CMS requirements 63.8(b), (c), (d), and (e)		63.830(b)(6) 63.10(e)(3)
						Performance test reports 63.830(b)(4) 63.10(d)(2)
						Other CMS reporting 63.10(e)
						Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-12 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	Oxidizer (w/ >1 capture system and/or >1 APCD; only ACWS) CEMS for APCD and parameter monitoring for capture system 95% control 63.825(b)(7) (alternative)	of this subpart	Capture efficiency 63.825(f)(4)(i), 63.825(c)(2)(v), and 63.828(a)(5) and (b) See footnote 1 CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3) Material usage measurements 63.825(c)(2)(i) 63.825(f)(5) (implied by Eq. 8) CMS requirements 63.8(b), (c), (d), and (e) See footnote 2	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-12 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	ACWS) CEMS for APCD and parameter monitoring for capture system Monthly average HAP	of this subpart	63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-12 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	ACWS) CEMS for APCD and parameter monitoring for capture system Monthly average HAP	Capture efficiency test 63.827(e) or 63.827(f) and Appendix A of this subpart Compliance demonstration (monthly) 63.825(b)(9) 63.825(f)(4), (4)(i), (4)(ii)(A), (5), (7), and (7)(i) 63.825(c)(2)(i) - (iii), (v), and (viii) HAP content analysis 63.827(b)(2)	63.828(a)(5) and (b) See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-12 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/>1 capture system	63.827(e)	63.825(f)(4)(i),	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	and/or >1 APCD; only	or	63.825(c)(2)(v),	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of	ACWS)	63.827(f) and Appendix A	and		See footnote 2
	materials applied; or to			63.828(a)(5) and (b)	CMS records	
	#20% of the mass of	CEMS for APCD and	Compliance	See footnote 1	63.829(b)(3) and	Notification of
	solids applied; or to a	parameter monitoring for	demonstration (monthly)		63.10(c)	performance test
	calculated equivalent	capture system	63.825(b)(10)	CEMS	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.825(f)(4), (4)(i),	63.825(c)(2)(iii) and		
	63.825(b) (cont.)	Monthly HAP emissions	(4)(ii)(A), (5), (6), (7), and	63.828(a)(2)(i) and (a)(3)	General recordkeeping	SSM reports 63.830(b)(5)
		less than calculated	(7)(iii)		63.10(b)(1) and (2)	63.10(d)(5)
		allowable emissions		Material usage		_
		63.825(b)(10)	and (viii)	measurements		Summary reports
		63.825(f)(4)		63.825(c)(2)(i)		63.830(b)(6)
			Monthly allowable HAP			63.10(e)(3)
			emissions	63.825(f)(5)		D C
			63.825(e)(1) - (5)	(implied by Eq. 8)		Performance test reports
			IIAD 4 4 1 '	CMC :		63.830(b)(4)
			HAP content analysis	CMS requirements		63.10(d)(2)
			63.827(b)(2)	63.8(b), (c), (d), and (e)		Other CMC
			Calida aantant analysis	See footnote 2		Other CMS reporting 63.10(e)
			Solids content analysis			` '
			63.827(c)(2)			See footnote 2
						Notification of
						Compliance Status
						63.830(b)(3)
						63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-13. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with \$1 Never-Controlled Work Stations and/or \$1 Intermittently-Controllable Work Stations Continuous Parameter Monitoring Systems

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure (PPR) or	month to #5% of the	[w/ \$1 never-controlled	63.827(e)	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
Wide-Web Flexographic	organic HAP applied; or	work stations (NCWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(WWF) presses	to #4% of the mass of	and/or \$1 intermittently-		See footnote 1		See footnote 2
All emission points	materials applied; or to	controllable work station	of this subpart		CMS records	
combined 63.821(a)(2)	#20% of the mass of	(ICWS)]		Destruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		Oxidizer destruction	63.825(f)(3)(i)	63.10(c)	performance test
	calculated equivalent	CPMS for APCD and	efficiency test	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	capture system	63.827(d)	and:		
	63.825(b)		or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		95% control	test waived per	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(7)	63.827(a)(2)	63.828(a)(4)(ii) for		
		63.825(f)(3)	[citing $63.7(e)(2)(iv)$ or	catalytic		Summary reports
			63.7(h)]			63.830(b)(6)
				Intermittently-controllable		63.10(e)(3)
			Compliance	work station(s)		
			demonstration (monthly)			Performance test reports
			63.825(b)(7)	and		63.830(b)(4)
				63.828(a)(1)(i), (ii), (iii),		63.10(d)(2)
			(3)(iii)(B), (5), (7), and	or (iv)		O.I. CMG
			(7)(iv)	M (1.1		Other CMS reporting
			63.825(d)(1)(iii) and (v)	Material usage		63.10(e)
			63.825(g)(1) - (4) and (6)	measurements		See footnote 2
			II A D t t 1 :-	63.825(g)		NI_4:6:4: 6
			HAP content analysis 63.827(b)(2)	63.825(f)(5)		Notification of Compliance Status
			03.04/(0)(4)	(implied by Eq. 8)		63.830(b)(3)
				CMS requirements		, , , ,
				CMS requirements 63.8(b), (c), (d), and (e)		63.9(h)
				See footnote 2		
				see jooinoie 2		

Table E-13 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	63.827(e)	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	See footnote 1		See footnote 2
	materials applied; or to	CPMS for APCD and			CMS records	
	#20% of the mass of	capture system	Destruction efficiency te	sDestruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		63.827(d) {or	63.825(f)(3)(i)	63.10(c)	performance test
	calculated equivalent	Monthly average HAP	test waived per	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass		63.827(a)(2)	and:		
	63.825(b) (cont.)	#0.20 kg HAP per kg	[per 63.7(e)(2)(iv) or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
			63.7(h)]}	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(8)		63.828(a)(4)(ii) for		
		63.825(f)(3)	Compliance	catalytic		Summary reports
			demonstration (monthly)			63.830(b)(6)
			63.825(b)(8)	Intermittently-controllable	:	63.10(e)(3)
			63.825(f)(3), (3)(i), (3)(ii),	work station(s)		
			(3)(iii)(B), (5), (6), (7),	63.828(a)(1)		Performance test reports
			and (7)(ii)	and		63.830(b)(4)
			63.825(d)(1)(v)	63.828(a)(1)(i), (ii), (iii),		63.10(d)(2)
			63.825(g)(1) - (4) and (6)	or (iv)		
						Other CMS reporting
			HAP content analysis	Material usage		63.10(e)
			63.827(b)(2)	measurements		See footnote 2
				63.825(g)		
			Solids content analysis	63.825(f)(5)		Notification of
			63.827(c)(2)	(implied by Eq. 8)		Compliance Status
						63.830(b)(3)
				CMS requirements		63.9(h)
				63.8(b), (c), (d), and (e)		
				See footnote 2		

Table E-13 (continued)

Affected Source	Standard	Compliance Oution	Performance Testing/ Compliance	Manitanina	December of the control of the contr	Donastin s
& Emission Point	12 111 1111	Compliance Option	Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses		Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	63.827(e)	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	or	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A	See footnote 1		See footnote 2
	materials applied; or to	CPMS for APCD and			CMS records	
		capture system	Destruction efficiency te		63.829(b)(3) and	Notification of
	solids applied; or to a		63.827(d) {or	(/ (/ (/	63.10(c)	performance test
		Monthly average HAP	test waived per	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
		emission rate	63.827(a)(2)	and:		
		#0.04 kg HAP per kg	[per 63.7(e)(2)(iv) or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
			63.7(h)]}	noncatalytic	63.10(b)(1) and (2)	63.10(d)(5)
		applied basis		63.828(a)(4)(ii) for		
		63.825(b)(9)	Compliance	catalytic		Summary reports
		63.825(f)(3)	demonstration (monthly)			63.830(b)(6)
			63.825(b)(9)	Intermittently-controllable	;	63.10(e)(3)
			63.825(f)(3), (3)(i), (3)(ii),	work station(s)		
			(3)(iii)(B), (5), (7), and	63.828(a)(1)		Performance test reports
			(7)(i)	and		63.830(b)(4)
			63.825(d)(1)(v)	63.828(a)(1)(i), (ii), (iii),		63.10(d)(2)
			63.825(g)(1) - (4) and (6)	or (iv)		
						Other CMS reporting
			HAP content analysis	Material usage		63.10(e)
			63.827(b)(2)	measurements		See footnote 2
				63.825(g)		
				63.825(f)(5)		Notification of
				(implied by Eq. 8)		Compliance Status
				CMC		63.830(b)(3)
				CMS requirements		63.9(h)
				63.8(b), (c), (d), and (e)		
				See footnote 2		

Table E-13 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the	(w/ \$1 NCWS and/or \$1	63.827(e) [or	63.825(f)(3)(ii)	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	ICWS)	63.827(f) and Appendix	63.828(a)(5) and (b)	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		A]	See footnote 1		See footnote 2
	materials applied; or to	CPMS for APCD and			CMS records	
	#20% of the mass of	capture system	Destruction efficiency te	sDestruction efficiency	63.829(b)(3) and	Notification of
	solids applied; or to a		63.827(d) {or	63.825(f)(3)(i)	63.10(c)	performance test
	calculated equivalent	Monthly HAP emissions	test waived per	63.828(a)(2)(ii) and (b)	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	less than calculated	63.827(a)(2)	and:		
	63.825(b) (cont.)		[per 63.7(e)(2)(iv) or	63.828(a)(4)(i) for	General recordkeeping	SSM reports 63.830(b)(5)
		63.825(b)(10)	63.7(h)]}	,	63.10(b)(1) and (2)	63.10(d)(5)
		63.825(f)(3)		63.828(a)(4)(ii) for		
			Compliance	catalytic		Summary reports
			demonstration (monthly)			63.830(b)(6)
			63.825(b)(10)	Intermittently-controllable	;	63.10(e)(3)
			63.825(f)(3), (3)(i), (3)(ii),	work station(s)		
			(3)(iii)(B), (5), (6), (7),	63.828(a)(1)		Performance test reports
			and (7)(iii)	63.828(a)(1)(i), (ii), (iii),		63.830(b)(4)
			63.825(d)(1)(v)	or (iv)		63.10(d)(2)
			63.825(g)(1) - (4) and (6)			
				Material usage		Other CMS reporting
			Monthly allowable HAP			63.10(e)
			emissions	63.825(e)		See footnote 2
			63.825(e)(1) - (5)	63.825(g)		N
			HAD 4 462 027/13/23	63.825(f)(5)		Notification of
			HAP content 63.827(b)(2)	(implied by Eq. 8)		Compliance Status
			Solids content	CMS requirements		63.830(b)(3)
				CMS requirements		63.9(h)
			63.827(c)(2)	63.8(b), (c), (d), and (e) See footnote 2		

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-14. Compliance Options for PPR and WWF Presses under Subpart KK Oxidizer with \$1 Never-Controlled Work Stations and/or \$1 Intermittently-Controllable Work Stations Continuous Emissions Monitoring System

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
Rotogravure (PPR) or	month to #5% of the	[w/\$1 never-controlled	63.827(e)	63.825(f)(4)(i),	63.829(b)(1) and	performance evaluation
Wide-Web Flexographic	organic HAP applied; or	work stations (NCWS)	or	63.825(c)(2)(v),	63.10(b)(2)	63.9(g)(1)
(WWF) presses	to #4% of the mass of	and/or \$1 intermittently-	63.827(f) and Appendix A	and		See footnote 2
All emission points	materials applied; or to	controllable work station	of this subpart	63.828(a)(5) and (b)	CMS records	
combined 63.821(a)(2)	#20% of the mass of	(ICWS)]		See footnote 1	63.829(b)(3) and	Notification of
	solids applied; or to a		Compliance		63.10(c)	performance test
	calculated equivalent	CEMS for APCD and	demonstration (monthly)	CEMS	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	parameter monitoring for	63.825(b)(7)	63.825(c)(2)(iii) and		
	63.825(b)	capture system	63.825(f)(4), (4)(i),	63.828(a)(2)(i) and (a)(3)	General recordkeeping	SSM reports 63.830(b)(5)
			(4)(ii)(B), (5), (7), and		63.10(b)(1) and (2)	63.10(d)(5)
		95% control	(7)(iv)	Intermittently-controllable	:	
		63.825(b)(7)	63.825(c)(2)(ii), (iii), and	work station(s)		Summary reports
		63.825(f)(4)	(v)	63.828(a)(1)		63.830(b)(6)
			63.825(g)(1) - (4) and (6)	and		63.10(e)(3)
				63.828(a)(1)(i), (ii), (iii),		
			HAP content analysis	or (iv)		Performance test reports
			63.827(b)(2)			63.830(b)(4)
				Material usage		63.10(d)(2)
				measurements		
				63.825(g)		Other CMS reporting
				63.825(f)(5)		63.10(e)
				(implied by Eq. 8)		See footnote 2
				CMS requirements		Notification of
				63.8(b), (c), (d), and (e)		Compliance Status
				See footnote 2		63.830(b)(3)
						63.9(h)

Table E-14 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All emission points combined 63.821(a)(2) organ to #44 mater #20% solids calculallow	th to #5% of the nic HAP applied; or 1 4% of the mass of rials applied; or to % of the mass of ls applied; or to a sulated equivalent vable mass 25(b) (cont.)	(w/ \$1 NCWS and/or \$1 ICWS) CEMS for APCD and parameter monitoring for capture system Monthly average HAP emission rate #0.20 kg HAP per kg solids, as applied 63.825(b)(8) 63.825(f)(4)	of this subpart Compliance demonstration (monthly) 63.825(b)(8) 63.825(f)(4), (4)(i), (4)(ii)(B), (5), (6), (7), and (7)(ii) 63.825(c)(2)(ii), (iii), and (v)	63.825(c)(2)(v), and 63.828(a)(5) and (b) See footnote 1 CEMS 63.825(c)(2)(iii) and 63.828(a)(2)(i) and (a)(3)	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3)

Table E-14 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass 63.825(b) (cont.)	CEMS for APCD and parameter monitoring for capture system Monthly average HAP emission rate #0.04 kg HAP per kg	of this subpart Compliance demonstration (monthly) 63.825(b)(9) 63.825(f)(4), (4)(i), (4)(ii)(B), (5), (7), and (7)(i) 63.825(c)(2)(ii), (iii), and (v)	See footnote 1	Measurements 63.829(b)(1) and 63.10(b)(2) CMS records 63.829(b)(3) and 63.10(c) See footnote 2 General recordkeeping 63.10(b)(1) and (2)	Notification of CMS performance evaluation 63.9(g)(1) See footnote 2 Notification of performance test 63.830(b)(2) 63.9(e) SSM reports 63.830(b)(5) 63.10(d)(5) Summary reports 63.830(b)(6) 63.10(e)(3) Performance test reports 63.830(b)(4) 63.10(d)(2) Other CMS reporting 63.10(e) See footnote 2 Notification of Compliance Status 63.830(b)(3) 63.9(h)

Table E-14 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Oxidizer	Capture efficiency test	Capture efficiency	Measurements	Notification of CMS
All emission points	month to #5% of the		63.827(e)	63.825(f)(4)(i),	63.829(b)(1) and	performance evaluation
combined 63.821(a)(2)	organic HAP applied; or	`	or	63.825(c)(2)(v),	63.10(b)(2)	63.9(g)(1)
(cont.)	to #4% of the mass of		63.827(f) and Appendix A			See footnote 2
(=====,	materials applied; or to	CEMS for APCD and	·····		CMS records	
	#20% of the mass of	parameter monitoring for	Compliance	See footnote 1	63.829(b)(3) and	Notification of
	solids applied; or to a	capture system	demonstration (monthly)	· ·	63.10(c)	performance test
	calculated equivalent		63.825(b)(10)	CEMS	See footnote 2	63.830(b)(2) 63.9(e)
	allowable mass	Monthly HAP emissions	63.825(f)(4), (4)(i),	63.825(c)(2)(iii) and	·	
	63.825(b) (cont.)	less than calculated	(4)(ii)(B), (5), (6), (7), and	63.828(a)(2)(i) and (a)(3)	General recordkeeping	SSM reports 63.830(b)(5)
		allowable emissions	(7)(iii)		63.10(b)(1) and (2)	63.10(d)(5)
		63.825(b)(10)	63.825(c)(2)(ii), (iii), and	Intermittently-controllable		
		63.825(f)(4)	(v)	work station(s)		Summary reports
			63.825(g)(1) - (4) and (6)	63.828(a)(1)		63.830(b)(6)
				and		63.10(e)(3)
			Monthly allowable HAP	63.828(a)(1)(i), (ii), (iii),		
			emissions	or (iv)		Performance test reports
			63.825(e)(1) - (5)			63.830(b)(4)
				Material usage		63.10(d)(2)
			HAP content 63.827(b)(2)			
				63.825(e)		Other CMS reporting
			Solids content	63.825(g)		63.10(e)
			63.827(c)(2)	63.825(f)(5)		See footnote 2
				(implied by Eq. 8)		
				G) KG		Notification of
				CMS requirements		Compliance Status
				63.8(b), (c), (d), and (e)		63.830(b)(3)
				See footnote 2		63.9(h)

^{1.} Subpart KK requires the facility to propose every facet of the monitoring approach for capture efficiency. When you have approved by these site-specific monitoring requirements, they must be included in the permit.

^{2.} We consider systems for tracking material usage and/or recovered solvent to be CMS for purposes of the MACT General Provisions. However, the General Provisions for CMS monitoring, recordkeeping, and reporting should be applied to be appropriate and reasonable for each such tracking system. See Section 5.3.1.

Table E-15. Compliance Options for PPR and WWF Presses under Subpart KK Mixed Control Devices [Solvent Recovery and Oxidizer(s)] and/or Mixed Capture Systems [ACWS(s) or NCWS(s)/ICWS(s)] and/or Mixed Monitoring [Material Balance/CPMS/CEMS]

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All Product and Packagin Rotogravure (PPR) or Wide-Web Flexographic (WWF) presses All emission points combined 63.821(a)(2)	month to #5% of the	Mixed control devices and/or mixed monitoring systems, but only always-controlled work stations 95% control 63.825(b)(7) 63.825(h)	monitoring system combination, performanc	For each control device/monitoring system ecombination, monitoring per the applicable portion of the tables above	monitoring system combination, recordkeeping per the	For each control device/ monitoring system combination, notification and reports per the applicable portion of the tables above
All PPR or WWF pressesAll emission points combined 63.821(a)(2) (cont.)	month to #5% of the	Mixed control devices and/or mixed capture systems and/or mixed monitoring systems 95% control 63.825(b)(7) 63.825(f)		ecombination, monitoring per the applicable portion of the tables above	combination, recordkeeping per the	For each control device/capture system/monitoring system combination, notification and reports per the applicable portion of the tables above

Table E-15 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Mixed control devices	For each control	For each control	For each control	For each control
All emission points	month to #5% of the	and/or	device/capture system/	device/capture	device/capture	device/capture
combined 63.821(a)(2)	organic HAP applied; or	mixed capture systems	monitoring system	system/monitoring system	system/monitoring system	system/monitoring system
(cont.)	to #4% of the mass of	and/or	combination, performanc	ecombination, monitoring	combination,	combination, notifications
	materials applied; or to	mixed monitoring	testing and coating/solve	pe r the applicable portion	recordkeeping per the	and reports per the
	#20% of the mass of	systems	analyses per the	of the tables above	applicable portion of the	applicable portion of the
	solids applied; or to a		applicable portion of the		tables above	tables above
	calculated equivalent	Monthly average HAP	tables above			
	allowable mass	emission rate				
	63.825(b) (cont.)	#0.20 kg HAP per kg	Compliance			
		borrab, as appro-	demonstration (monthly)			
		00.020(0)(0)	63.825(b)(8)			
		63.825(f)	Applicable paragraphs of			
			63.825(f)			
			(f)(1), (2), (3), and/or (4)			
			(f)(5), (6), (7), and (7)(ii)			
			E MONIG AGING			
			For NCWS/ICWS,			
			63.825(g)(1) - (4),			
			and (5) or (6)			

Table E-15 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Mixed control devices	For each control	For each control	For each control	For each control
All emission points	month to #5% of the	and/or	device/capture system/	device/capture	device/capture	device/capture
combined 63.821(a)(2)	organic HAP applied; or	mixed capture systems	monitoring system	system/monitoring system	system/monitoring system	system/monitoring system
(cont.)	to #4% of the mass of	and/or	combination, performanc	ecombination, monitoring	combination,	combination, notifications
	materials applied; or to	mixed monitoring	testing and coating/solve	pe r the applicable portion	recordkeeping per the	and reports per the
	#20% of the mass of	systems	analyses per the	of the tables above	applicable portion of the	applicable portion of the
	solids applied; or to a		applicable portion of the		tables above	tables above
	calculated equivalent	Monthly average HAP	tables above			
	allowable mass	emission rate				
	63.825(b) (cont.)		Compliance			
		material applied, on as-	demonstration (monthly)			
		applied basis	63.825(b)(9)			
		63.825(b)(9)	Applicable paragraphs of			
		63.825(f)	63.825(f)			
			(f)(1), (2), (3), and/or (4)			
			(f)(5), (7), and (7)(i)			
			For NCWS/ICWS,			
			63.825(g)(1) - (4),			
			and (5) or (6)			

Table E-15 (continued)

Affected Source & Emission Point	Standard	Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Reporting
All PPR or WWF presses	Limit emissions for the	Mixed control devices	For each control	For each control	For each control	For each control
All emission points	month to #5% of the	and/or	device/capture system/	device/capture	device/capture	device/capture
combined 63.821(a)(2)	organic HAP applied; or	mixed capture systems	monitoring system	system/monitoring system	system/monitoring system	system/monitoring system
(cont.)	to #4% of the mass of	and/or	combination, performanc	ecombination, monitoring	combination,	combination, notifications
	materials applied; or to	mixed monitoring	testing and coating/solve	pe r the applicable portion	recordkeeping per the	and reports per the
	#20% of the mass of	systems	analyses per the	of the tables above	applicable portion of the	applicable portion of the
	solids applied; or to a		applicable portion of the		tables above	tables above
	calculated equivalent	Monthly HAP emissions	tables above			
	allowable mass	less than calculated				
	63.825(b) (cont.)	allowable emissions	Compliance			
		63.825(b)(10)	demonstration (monthly)			
		63.825(f)	63.825(b)(10)			
			Applicable paragraphs o			
			63.825(f)			
			(f)(1), (2), (3), and/or (4)			
			(f)(5), (6), (7), and (7)(iii)			
			Monthly allowable HAP emissions			
			63.825(e)(1) - (5)			
			For NCWS/ICWS, 63.825(g)(1) - (4), and (5) or (6)			

EXAMPLE

Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

NOTES AND ASSUMPTIONS

Example Facility

The facility is assumed to be an existing major source of HAP that operates six wide-web flexographic printing presses, designated as WWF01 through WWF06. The facility has opted to meet subpart KK through the use of compliant materials (low-HAP inks, solvents, etc.).

Applicability

Under the definitions in §63.822, the presses at this facility are considered "wide-web flexographic presses." Because the facility is a major source of HAP that operates such a press, subpart KK applies to the facility [§ 63.820(a)(1)].

The "affected source" under subpart KK consists of all six presses combined. None of the presses qualify for the exemptions for proof presses [§63.821(a)(2)(i)]; for "ancillary printing" [presses primarily used for coating, laminating, or other operations; see §63.821(a)(2)(ii)]; or for "incidental printing" [low usage presses; see §63.821(b)(1) and (2)]. Further, the facility has not elected to include in the affected source any stand-alone coating equipment that would be eligible for inclusion under §63.821(a)(3).

Method of Compliance Determination

For this example, the facility has a wide margin of compliance because most inks, solvents, etc., have very low (or zero) HAP content, although a few low-use materials are not compliant as purchased. The facility will demonstrate compliance based on purchase records, treating all materials as if they were used on the day they were delivered to the facility. This approach, which minimizes tracking procedures, is possible because of the wide margin of compliance.

Desired Compliance Flexibility

For the permit conditions that follow, the facility wishes to maintain the flexibility to demonstrate monthly compliance using any of the six options in the rule that are based on compliant materials. The facility is not required to use the same compliance option each month.

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Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

Example Permit Conditions for subpart KK

APPLICABILITY OF 40 CFR PART 63, SUBPART KK

- 1. The facility is subject to the provisions of 40 CFR part 63, subpart KK–National Emission Standards for the Printing and Publishing Industry (hereinafter "subpart KK"). [§63.820(a)(1)] In addition, the facility is subject to the provisions of 40 CFR part 63, subpart A–General Provisions (hereinafter "the General Provisions"), to the extent specified in Table 1 of subpart KK. [§63.823] For convenience, Table 1 of subpart KK is attached to this permit. Subsequent conditions of this permit specify how the applicable General Provisions sections related to performance tests and monitoring are to be applied to this facility.
- 2. The affected source consists of the six wide-web flexographic presses designated by the facility as WWF01 through WWF06. [§63.821(a)(2)] Each wide-web flexographic press included in the affected source consists of the unwind or feed section; the series of work stations; the dryers associated with the work stations (including any interstage dryers and overhead tunnel dryers); and the rewind, stack, or collection station. The work stations may be oriented vertically, horizontally, or around the circumference of a single large impression cylinder. Inboard and outboard work stations (including those employing any other technology, such as rotogravure) are included if they are capable of printing or coating on the same substrate. [§63.822(a)]

EMISSIONS LIMITATION

3. Beginning on May 30, 1999, the facility shall limit organic HAP emissions from the affected source (1) to no more than 5 percent of the organic HAP applied for the month; or (2) to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or (3) to no more than 20 percent of the mass of solids applied for the month; or (4) to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. [§§63.825(b) and 63.826(a)]

For the purposes of this permit, a "month" means a calendar month. [§63.822(a)] [For this example, it is assumed that the facility did not establish an alternative "prespecified period of 28 days to 35 days" as allowed by §63.822(a). As appropriate, an alternative "month" may be specified during initial permit issuance, when the permit is reopened to incorporate the MACT standard, or with a minor permit modification (MPM).]

EXAMPLE

Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

COMPLIANCE DETERMINATIONS

4. The facility shall demonstrate compliance for each month by one of the methods indicated in Table O of this permit, beginning with June 1999. [§63.825(b)(1) - (6)]

[Condition No. 4 is based on the facility being an existing source with a compliance date of May 30, 1999. The date should be adjusted as appropriate for new or reconstructed affected sources with different applicable compliance dates. Including the date reinforces that compliance demonstrations using compliant coating options must begin immediately upon the compliance date and that the General Provisions' allowance for later performance tests does not apply.]

The compliance demonstration methods are summarized below (see the cited sections of the rule for the full requirements):

A. §63.825(b)(1)

- Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
- ii. Show that the organic HAP weight fraction of each material is #0.04.

B. §63.825(b)(2)

- i. Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
- Measure the mass of each solids-containing material (e.g., ink) applied during the month, on an as-purchased basis. (See Condition No. 6 for materials usage monitoring procedures.)
- iii. For each individual solids-containing material, measure the mass of each non-solids-containing material (e.g., thinner) added to the solids-containing material during the month, on an as-purchased basis. (See Condition No. 6 for materials usage monitoring procedures.)
- iv. Calculate the monthly average as-applied organic HAP weight fraction for each solids-containing material using Equation 3 of subpart KK.
- v. Show that the monthly average as-applied organic HAP weight fraction of each solids-containing material is #0.04.

EXAMPLE

Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

C. §63.825(b)(3)

- i. Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
- ii. Use the procedures of Condition No. 4B to determine which solids-containing materials achieve a monthly average as-applied organic HAP weight fraction #0.04.
- iii. For solids-containing materials that do not achieve a monthly average as-applied organic HAP weight fraction #0.04, determine the as-purchased weight fraction of solids (See Condition No. 5 for solids content determination procedures.)
- iv. For each of these other solids-containing materials, calculate the monthly average asapplied solids content using Equation 4 of subpart KK.
- v. For each of these other solids-containing materials, calculate the average monthly asapplied organic HAP-to-solids ratio using Equation 5 of subpart KK.
- vi. Show that for each solids-containing material either (1) the monthly average asapplied organic HAP weight fraction is #0.04 or (2) the monthly average asapplied organic HAP-to-solids ratio is #0.20.

D. §63.825(b)(4)

- Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
- ii. Measure the mass of each material applied during the month, on an as-purchased basis. (See Condition No. 6 for materials usage monitoring procedures.)
- iii. Calculate the monthly average as-applied organic HAP content of all materials applied using Equation 6 of subpart KK.
- iv. Show that the monthly average as-applied organic HAP weight fraction of all materials applied is #0.04.

E. §63.825(b)(5)

- Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
- ii. Determine the as-purchased weight fraction of solids in each solids-containing material applied during the month. (See Condition No. 5 for solids content determination procedures.)
- iii. Measure the mass of each material applied during the month, on an as-purchased basis. (See Condition No. 6 for materials usage monitoring procedures.)
- iv. Calculate the monthly average as-applied organic HAP-to-solids ratio using Equation 7 of subpart KK.

EXAMPLE

Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

- v. Show that the monthly as-applied organic HAP-to-solids ratio is #0.20.
- F. §§63.825(b)(6) and 63.825(e)
 - Determine the organic HAP content, on an as-purchased basis, of each material applied during the month. (See Condition No. 5 for HAP content determination procedures.)
 - ii. Measure the mass of each material applied during the month, on an as-purchased basis. (See Condition No. 6 for materials usage monitoring procedures.)
 - iii. Calculate the total mass of organic HAP applied during the month using Equation 8 of subpart KK.
 - iv. Determine the as-purchased weight fraction of solids in each solids-containing material applied during the month. (See Condition No. 5 for solids content determination procedures.)
 - v. For the month, determine the as-purchased mass fraction of each solids-containing material which was applied at 20 weight-percent or greater solids content, on an asapplied basis.
 - vi. Determine the total mass of non-solids-containing materials added during the month to solids-containing materials which were applied at less than 20 weight-percent solids content, on an as-applied basis.
 - vii. Calculate the monthly allowable organic HAP emissions using Equation 17 of subpart KK.
 - viii. Show that the total mass of organic HAP applied during the month (from Equation 8) is less than the allowable organic HAP emissions for the month (from Equation 17).

[These monthly compliance determinations are not considered "performance testing, or another form of compliance demonstration" for purposes of §63.7(a)(1) of the General Provisions. Accordingly, §63.7 of the General Provisions, with its requirements for advance notifications, site-specific test plans, and test reports, does not apply to the monthly compliance determinations.]

PERFORMANCE TEST METHODS

5. As necessary according to Table O of this permit for the selected compliance demonstration option, the facility shall determine the organic HAP, volatile matter, and/or solids weight fraction of each ink, coating, varnish, adhesive, primer, solvent, thinner, reducer, diluent, and other material applied, using the procedures indicated in Table O. [§§63.827(b)(2), (c)(2), and (c)(3)]

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The material composition determination methods are summarized below (see the cited sections of the rule for the full requirements):

- A. Organic HAP Content [§63.827(b)(2)]. Determine organic HAP content according to i, ii, or iii below, subject to the provisions of iv:
 - i. Use Method 311 (40 CFR part 63, appendix A).
 - ii. Determine volatile matter content and use this value for the organic HAP content for all compliance purposes.
 - iii. Use formulation data provided on a Certified Product Data Sheet.
 - iv. If a Method 311 test value is higher than formulation data, the Method 311 test data govern.
- B. Volatile Matter and Solids Content [§63.827(c)(2) and (3)]. Determine volatile matter and solids content according to i or ii below, subject to the provisions of iii:
 - i. Use Method 24 (40 CFR part 60, appendix A).
 - ii. Use formulation data.
 - iii. If there is any inconsistency between the formulation data and the results of Method 24, the Method 24 data govern.

[Section 63.7(f) applies if the facility wants to rely on an alternative test method for determining material composition. However, the material composition determinations required in § 63.827 generally are not considered "performance tests" for purposes of the General Provisions. Accordingly, the rest of §63.7 and other related provisions of the General Provisions do not apply to these composition determinations. See Section 5.4.3 for additional guidance.]

MONITORING REQUIREMENTS

- 6. The measurement, recordkeeping, and calculation procedures used by the facility to demonstrate compliance on a monthly basis constitute a continuous monitoring system (CMS) that is subject to the CMS provisions of the General Provisions, to the extent specified in Table 1 of Subpart KK and as indicated in Table O of this permit. [§63.2 definition of "CMS"] The CMS that the facility shall use is summarized in the following conditions:
 - A. General approach: The facility shall collect data for each month on the amount of each material applied on the wide-web flexographic printing affected source, and on the composition of each material applied (HAP, solids, and/or volatile matter content,

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Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

depending on the compliance option used). Using these data, the facility shall determine its compliance status for each month using one of six options in subpart KK (see Condition No. 4).

- B. Monitoring methods and location: The facility shall collect purchase records for each month on the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, diluents, and other materials used on the affected source. For purposes of demonstrating compliance, the facility shall treat each material purchased as if it were all applied on the day it was delivered to the facility. The facility shall collect data on the composition of each material, such as test data or Certified Product Data Sheets (CPDS) from the supplier. The facility shall retain material composition data in a permanent file. The facility shall determine compliance for each month using any of the six compliance options in 40 CFR 63.825(b)(1) through (6).
- C. Indicator range: This parameter is not applicable to this monitoring approach. The facility determines compliance directly for each month by one of the six compliant coating options in 40 CFR 63.825(b)(1) through (6).
- D. Data collection frequency: At least monthly.
- E. Averaging period: For the compliance options in 40 CFR 63.825(b)(2), (3), (4), and (5), the facility shall average the data for each monthly compliance demonstration. For the compliance options in 40 CFR 63.825(b)(1) and (6), the facility shall demonstrate compliance monthly, but will not average the data.
- F. Recordkeeping: The facility shall keep records of data on HAP and solids content in a permanent file. The facility shall keep records of all material usage measurements (including inventory data and purchase records), and all material composition data (including Method 24/311 data and/or CPDS from suppliers) pursuant to [insert the provisions of your Title V program that implement 40 CFR 70.6(a)(3)(ii) and (iii)].
- G. QA/QC: The facility shall review data collection, calculation, and recordkeeping procedures at least annually to ensure that they are adequate to determine compliance conclusively and that they are being implemented properly by facility personnel. The facility shall also use Method 24/311 QA/QC procedures if those methods are used.
- 7. Monitoring plan: The facility shall prepare a detailed monitoring plan that conforms to the summary contained in Condition No. 6, and submit the plan to the permitting authority for approval. The facility shall conduct monitoring according to the procedures in the approved

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Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

plan. The monitoring plan may be changed with the approval of the permitting authority without revising this permit, provided that the plan continues to conform to the summary contained in Condition No. 6.

- 8. Based on the monitoring system described in Condition No. 6 above (which does not use any measurement instruments), the CMS provisions of 40 CFR 63.8 shall be interpreted and applied as follows:
 - A. To comply with 40 CFR 63.8(c), *Operation and maintenance of continuous monitoring systems*, the facility shall ensure that the CMS functions to gather accurate data (quantity and composition) on the materials delivered to the facility for use on the affected source. If at any time (such as during monthly compliance calculations or periodic QA/QC reviews) the facility determines that the data collection, calculation, and recordkeeping procedures are not adequate to determine compliance conclusively and/or that the procedures are not being implemented properly by facility personnel, the CMS shall be considered "out of control" until such time as the problems are corrected. (These out-of-control periods could be the result of failure to obtain material composition data that meet subpart KK requirements, failure to log material deliveries, or other such deficiencies that prevent the facility from conclusively determining compliance for any month.) During the out-of-control period, the facility shall not use the recorded data in compliance calculations. The facility shall submit all information concerning out-of-control periods, including start and end dates and descriptions of corrective actions taken, in the semiannual reports described below in Condition No. 12B.
 - B. To comply with 40 CFR 63.8(d), *Quality control program*, the facility shall develop a written protocol for the periodic QA/QC review of data collection, calculation, and recordkeeping procedures described above in Condition No. 6G.
 - C. To comply with 40 CFR 63.8(e), *Performance evaluation of continuous monitoring systems*, the facility shall notify the permitting authority at least 60 days prior to the date of each periodic QA/QC review (see Condition No. 6G) to provide an opportunity for the permitting authority to observe the review. If requested, the facility shall provide a copy of the written protocol for the review to the permitting authority prior to the review. The facility shall report the results of the review in the next semiannual report (see Condition No. 12A).

[Because the CMS in this example does not rely on <u>any</u> measurement instruments, the §63.8 CMS provisions are applied only in a very general way. However, when any instruments are used, the permit conditions should reflect the CMS provisions in a way

EXAMPLE

Compliance Options Matrix Approach for a Wide-Web Flexographic Facility

that is appropriate for the type of instruments used. This includes instruments used in conjunction with material tracking, such as solvent flow meters and weigh scales.]

RECORDKEEPING REQUIREMENTS

- 9. The facility shall maintain files of all information (including all reports and notifications) required under this permit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [§§63.829(b) and 63.10(b)(1)]
- 10. The facility shall maintain records maintain records as indicated in Table O of this permit. Additional detail regarding these requirements, as well as additional recordkeeping requirements not related to compliance, follows.
 - A. The facility shall maintain records on a monthly basis of all measurements needed to demonstrate compliance, such as material usage, HAP usage, solids usage, and material composition. [§§63.829(b)(1) and 63.10(b)(2)(vii)]
 - B. The facility shall maintain records of all documentation supporting the initial notification [previously submitted by the facility pursuant to 40 CFR 63.830(b)(1)] and the notification of compliance status [previously submitted by the facility pursuant to 40 CFR 63.830(b)(3)]. [§63.10(b)(2)(xiv)]
 - C. The facility shall maintain records of each applicability determination performed by the facility in accordance with the requirements of 40 CFR 63.820(a). [§§63.829(b)(2) and 63.10(b)(3)]
 - D. The facility is subject to the CMS recordkeeping provisions of the General Provisions at 40 CFR 63.10(b) and (c). [§63.829(b)(3) and Table 1 to subpart KK] Based on the monitoring system described in Condition No. 6 above (which does not use any measurement instruments), these provisions are interpreted and applied to require the facility to maintain the following records:
 - i. All required CMS measurements, that is, all data collected on material composition and usage. [\$63.10(c)(1)]
 - ii. The date and time identifying each period during which the CMS was out of control,

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- as defined above in Condition No. 8A. [§§63.10(b)(2)(vi) and (c)(6)]
- iii. The specific identification of each month that the facility does not comply with the subpart KK emissions limitations. (There is no need to differentiate based on periods of startup, shutdown, or malfunction; the related provisions do not apply because the facility does not operate an add-on control device.) [§§63.10(c)(7) and (8)]
- iv. The nature of any changes to the material tracking system (i.e., the CMS) as a result of any out-of-control periods, as defined above in Condition No. 8A. [§63.10(c)(12)]
- v. The total process operating time during the reporting period. [§63.10(c)(13)]
- vi. All procedures and results that are part of the quality control program and performance evaluations developed and implemented pursuant to Conditions Nos. 6G, 8B, and 8C. [§63.10(b)(2)(viii) and (c)(14)]
- E. The following recordkeeping requirements are not applicable to this facility at this time:
 - i. Sections 63.10(b)(2)(i) (v), (ix) (xi), and (xiii); and 63.10(c)(2) (5), (9) (11), and (15) do not apply because the facility does not operate an add-on control device (and consequently, startup, shutdown, and malfunction provisions do not apply), or an instrumental CMS.
 - ii. Section 63.829(c) does not apply because the facility does not comply through liquid-liquid material balance.
 - iii. Sections 63.829(d), (e), and (f) do not apply because the facility is not utilizing any of the exemptions with which these records are associated.
 - iv. Section 63.10(b)(2)(xii) does not apply because the facility has not obtained a waiver of recordkeeping and reporting requirements pursuant to §63.10(f).

[The CMS recordkeeping provisions of §63.10(b) and (c) are interpreted and applied in Conditions Nos. 10D and 10E to be consistent with the CMS framework established above in Conditions Nos. 6 through 8 (i.e., a system that includes no measurement instruments). When any instruments are used, the recordkeeping permit conditions should reflect the CMS provisions in a way that is appropriate for the type of instruments used. This includes instruments used in conjunction with material tracking, such as solvent flow meters and weigh scales.]

[For this example, the facility does not have a recordkeeping and reporting waiver. If the facility had a recordkeeping and reporting waiver, §63.10(b)(2)(xii) would apply, as well as any requirements related to the waiver (such as conditions for the waiver or alternative recordkeeping and reporting requirements). These requirements should be detailed in the permit.]

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11. The facility shall maintain an on-site implementation log (OSIL) and associated records on and after May 30, 1999 to document the compliance option currently in use and the associated requirements and procedures for compliance determinations, monitoring, recordkeeping, and reporting. In addition, the records associated with the OSIL must include the most recent material composition determinations for the materials used at the facility, identifying the method used for each determination. The OSIL must be updated contemporaneously with a change in the compliance option used by the facility. The facility shall make the OSIL available for inspection upon request by the permitting authority or any member of the public.

[Maintaining an OSIL is required in order to receive compliance flexibility. The OSIL logs the current compliance obligations of the facility for the benefit of the public, permitting authority inspector, and the facility's operating personnel. The OSIL must be available for review by you and the public. The facility may make the OSIL available on site, or may submit the OSIL to you so that you can make it available to the public.]

REPORTING AND NOTIFICATION REQUIREMENTS

- 12. The facility shall submit the reports and notifications indicated in Table O of this permit and specified below. In addition to the reporting and notification requirements of subpart KK, the facility is subject to the general reporting provisions and the CMS reporting provisions of the General Provisions at 40 CFR 63.10(d) and (e), to the extent indicated by Table 1 to subpart KK. Based on the monitoring system described in Condition No. 6 above (which does not use any measurement instruments), these provisions are interpreted and applied as indicated in the following conditions:
 - A. Summary reports [§63.830(b)(6) and 63.10(e)(3)] shall be submitted on a semi-annual basis. Summary reports shall cover the periods from January 1 through June 30, and from July 1 to December 31, and shall be submitted within 30 days after the end of each period. Summary reports shall include the following information:
 - i. The company name and address of the affected source
 - ii. An identification of each hazardous air pollutant
 - iii. The beginning and ending dates of the reporting period
 - iv. A brief description of the process unit
 - v. The applicable emissions limitations specified in §63.825
 - vi. The dates of any periodic QA/QC reviews (see Condition No. 6G) that were conducted during the reporting period, and the results of these reviews
 - vii. The total operating time of the affected source during the reporting period
 - viii. An emissions data summary identifying any months in which the affected source did

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- not comply with the applicable emissions limitations specified in §63.825
- ix. A CMS performance summary including the total amount of time that the CMS was out of control (as defined above in Condition No. 8A) during the reporting period and the total duration of out-of-control time expressed as a percent of the total affected source operating time during the reporting period.
- x. A description of any changes in processes or controls since last reporting period (if applicable)
- xi. The name, title, and signature of the responsible official who is certifying the accuracy of the report
- xii. The date of the report

The schedule for submitting reports can be changed per $\S63.10(a)(5)$, (6) and (7).

- B. If the affected source did not comply with the applicable emissions limitations specified in §63.825 for any month in the reporting period, or the total duration of out-of-control time is greater than 5 percent of the total affected source operating time for the reporting period, the facility shall include the information required in Conditions Nos. 8A, 10D(ii), and 10D(iv) in the summary report required under Condition No. 12A. [§63.10(e)(3)(v), (vii), and (viii)]
- C. A report of any change in information already provided in the Notification of Compliance Status or the Initial Notification shall be provided in writing within 15 calendar days after the change. [§63.9(j)]
- D. The following reporting requirements are not applicable to this facility at this time:
 - i. Sections 63.830(b)(2), (4), and (5) and 63.10(d)(2) and (5) do not apply because the facility does not operate an add-on control device (and consequently, the performance test provisions and the startup, shutdown, and malfunction provisions do not apply)
 - ii. Sections 63.830(b)(6)(ii) (iv) do not apply because the facility is not utilizing any of the exemptions with which this information is associated
 - iii. Section 63.10(d)(4) does not apply because the facility has not received an extension of compliance and is not required to submit the associated progress reports
 - iv. Sections 63.10(e)(1), (e)(2)(ii), (e)(3)(vi)(F), and (e)(4) do not apply because the facility does not operate a CMS that relies on instruments
 - v. Sections (e)(3)(ii) (iv) do not apply because subpart KK does not require the facility to submit reports more frequently than semiannually.

[The CMS reporting provisions of §63.10(e) are interpreted and applied in Conditions

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Nos. 12A, B, and D to be consistent with the CMS framework established above in the MONITORING and RECORDKEEPING conditions (i.e., a system that includes no measurement instruments). When any instruments are used, the reporting permit conditions should reflect the CMS provisions in a way that is appropriate for the type of instruments used. This includes instruments used in conjunction with material tracking, such as solvent flow meters and weigh scales.]

For this example, it is assumed that the facility has already submitted the Initial Notification and the Notification of Compliance Status (NOCS).

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TABLE 1 TO 40 CFR PART 63, SUBPART KK

General Provisions Reference	Applicable to Subpart KK	Comment
§63.1(a)(1)-(a)(4)	Yes	
§63.1(a)(5)	No	Section reserved
§63.1(a)(6)-(a)(8)	No	
§63.1(a)(9)	No	Section reserved
§63.1(a)(10)-(a)(14)	Yes	
§63.1(b)(1)	No	Subpart KK specifies applicability
§63.1(b)(2)-(b)(3)	Yes	
§63.1(c)(1)	Yes	
§63.1(c)(2)	No	Area sources are not subject to subpart KK
§63.1(c)(3)	No	Section reserved
§63.1(c)(4)	Yes	
§63.1(c)(5)	No	
§63.1(d)	No	Section reserved
§63.1(e)	Yes	
§63.2	Yes	Additional definitions in subpart KK
§63.3(a)-(c)	Yes	
§63.4(a)(1)-(a)(3)	Yes	
§63.4(a)(4)	No	Section reserved
§63.4(a)(5)	Yes	
§63.4(b-c)	Yes	
§63.5(a)(1)-(a)(2)	Yes	
§63.5(b)(1)	Yes	
§63.5(b)(2)	No	Section reserved
§63.5(b)(3)-(b)(6)	Yes	
§63.5(c)	No	Section reserved
§63.5(d)	Yes	
§63.5(e)	Yes	

General Provisions Reference	Applicable to Subpart KK	Comment
§63.5(f)	Yes	
§63.6(a)	Yes	
§63.6(b)(1)-(b)(5)	Yes	
§63.6(b)(6)	No	Section reserved
§63.6(b)(7)	Yes	
§63.6(c)(1)-(c)(2)	Yes	
§63.6(c)(3)-(c)(4)	No	Sections reserved
§63.6(c)(5)	Yes	
§63.6(d)	No	Section reserved
\$63.6(e)	Yes	Provisions pertaining to start-ups, shutdowns, malfunctions, and CMS do not apply unless an add-on control system is used
§63.6(f)	Yes	
§63.6(g)	Yes	
\$63.6(h)	No	Subpart KK does not require COMS
§63.6(i)(1)-(i)(14)	Yes	
§63.6(i)(15)	No	Section reserved
§63.6(i)(16)	Yes	
§63.6(j)	Yes	
§63.7	Yes	
§63.8(a)(1)-(a)(2)	Yes	
§63.8(a)(3)	No	Section reserved
\$63.8(a)(4)	No	Subpart KK specifies the use of solvent recovery devices or oxidizers
§63.8(b)	Yes	
§63.8(c)(1)-(3)	Yes	
§63.8(c)(4)	No	Subpart KK specifies CMS sampling requirements
§63.8(c)(5)	No	Subpart KK does not require COMS
§63.8(c)(6)-(c)(8)	Yes	Provisions for COMS are not applicable
§63.8(d)-(f)	Yes	

General Provisions Reference	Applicable to Subpart KK	Comment	
§63.8(g)	No	Subpart KK specifies CMS data reduction requirements	
§63.9(a)	Yes		
§63.9(b)(1)	Yes		
§63.9(b)(2)	Yes	Initial notification submission date extended	
§63.9(b)(3)-(b)(5)	Yes		
§63.9(c)-(e)	Yes		
§63.9(f)	No	Subpart KK does not require opacity and visible emissions observations	
§63.9(g)	Yes	Provisions for COMS are not applicable	
§63.9(h)(1)-(h)(3)	Yes		
§63.9(h)(4)	No	Section reserved	
§63.9(h)(5)-(h)(6)	Yes		
§63.9(i)	Yes		
§63.9(j)	Yes		
§63.10(a)	Yes		
§63.10(b)(1)-(b)(3)	Yes		
§63.10(c)(1)	Yes		
§63.10(c)(2)-(c)(4)	No	Sections reserved	
§63.10(c)(5)-(c)(8)	Yes		
§63.10(c)(9)	No	Section reserved	
§63.10(c)(10)-(c)(15)	Yes		
§63.10(d)(1)-(d)(2)	Yes		
§63.10(d)(3)	No	Subpart KK does not require opacity and visible emissions observations	
§63.10(d)(4)-(d)(5)	Yes		
§63.10(e)	Yes	Provisions for COMS are not applicable	
§63.10(f)	Yes		
§63.11	No	Subpart KK specifies the use of solvent recovery devices or oxidizers	
§63.12	Yes		
§63.13	Yes		

General Provisions Reference	Applicable to Subpart KK	Comment
§63.14	Yes	
§63.15	Yes	

TABLE O. COMPLIANCE OPTIONS FOR WWF01 THROUGH WWF06 UNDER SUBPART KK

Affected Source: Wide-web flexographic presses WWF01 through WWF06; all emission points combined [§63.821(a)(2)]

Emission Limits: Limit emissions for the month to #5% of the organic HAP applied; or to #4% of the mass of materials applied; or to #20% of the mass of solids applied; or to a calculated equivalent allowable mass. [§63.825(b)]

Compliance Options: The facility may use any of the six compliance options based on compliant coatings, as detailed in the table below.

Compliant Materials Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting ^a
A. §63.825(b)(1) Each material used contains #0.04 weight fraction organic HAP, as purchased	Compliance demonstration (monthly) [§63.825(b)(1)]; see Condition 4A HAP content analysis[§63.827(b)(2)]; see Condition 5A	HAP content [§63.825(b)(1)] See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [§§63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [§63.10(b)] CMS recordkeeping [§\$63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12
B. §63.825(b)(2) Each solids-containing material used contains #0.04 weight fraction organic HAP, monthly average as-applied basis	Compliance demonstration (monthly) [§63.825(b)(2)]; see Condition 4B HAP content analysis[§63.827(b)(2)]; see Condition 5A	Material usage measurements [§63.825(b)(2)(ii)] (implied by Eq. 3) Material composition data See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [§§63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [§63.10(b)] CMS recordkeeping [§§63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12

Compliant Materials Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting ^a
C. §63.825(b)(3) Each solids-containing material used contains #0.04 weight fraction organic HAP or #0.20kg HAP per kg solids, monthly average as-applied basis	Compliance demonstration (monthly) [§63.825(b)(3)]; see Condition 4C HAP content analysis [§63.827(b)(2)]; see Condition 5A Solids content analysis [§63.827(c)(2)]; see Condition 5B	Material usage measurements [§63.825(b)(3)(ii)] (implied by Eqs. 3 and 4) Material composition data See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [§§63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [§63.10(b)] CMS recordkeeping [§\$63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12
D. §63.825(b)(4) Average HAP content of materials applied #0.04 kg HAP per kg material, as applied	Compliance demonstration (monthly) [§63.825(b)(4)]; see Condition 4D HAP content analysis [§63.827(b)(2)]; see Condition 5A	Material usage measurements [§63.825(b)(4)] (implied by Eq. 6) Material composition data See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [§§63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [§63.10(b)] CMS recordkeeping [§§63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12

Compliant Materials Compliance Option	Performance Testing/ Compliance Demonstration	Monitoring	Recordkeeping	Notifications and Reporting ^a
E. §63.825(b)(5) Average HAP content of materials applied #0.20 kg HAP per kg solids, as applied	Compliance demonstration (monthly) [§63.825(b)(5)]; see Condition 4E HAP content analysis [§63.827(b)(2)]; see Condition 5A Solids content analysis [§63.827(c)(2)]; see Condition 5B	Material usage measurements [§63.825(b)(5)] (implied by Eq. 7) Material composition data See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [§§63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [§63.10(b)] CMS recordkeeping [§\$63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12
F. §63.825(b)(6) Total HAP applied less than equivalent allowable HAP	Compliance demonstration (monthly) [§63.825(b)(6) and (e)]; see Condition 4F HAP content analysis [§63.827(b)(2)]; see Condition 5A Solids content analysis [§63.827(c)(2)]; see Condition 5B Calculation of monthly allowable HAP emissions [§ 63.825(e)(1) - (5)]	Material usage measurements [§63.825(b)(6)] (implied by Eq. 8) Material composition data See Conditions 6, 7, and 8	On-site implementation log (OSIL) and associated records, see Condition 11 Measurements needed to demonstrate compliance [\$\\$63.829(b)(1) and 63.10(b)(2)(vii)] General recordkeeping [\\$63.10(b)] CMS recordkeeping [\\$\\$63.829(b)(3) and 63.10(c)] See Conditions 9 and 10	Semiannual reports [§§63.830(b)(6) and 63.10(e)(3)] See Condition 12

^a The Notification of Compliance Status (NOCS) was required of all facilities (see Section 5.4.1 of this document). For this example, it is assumed that the facility already submitted the NOCS and the Initial Notification.